

## **IN THE SPECIFICATION**

- (1) Delete Figures 1-9.
- (2) Delete paragraph [20] and replace it with:

[20] Any of the methods of the present invention can also be performed using any of the genes indentified as AF, AS, BF, and BS, as shown in Table Figure 8. These and other embodiments which will be apparent to those of skill in the art upon reading the specification provide the art with reagents and methods for detection, diagnosis, therapy, and drug screening pertaining to neuronal cell death and pathological processes involving or requiring neuronal cell death.

- (3) On page 35-36, replace the heading and paragraphs 21-29 with the following:

### **BRIEF DESCRIPTION OF THE ~~DRAWINGS~~ TABLES**

- [21] Table Fig. 1 shows genes which were down-regulated at day 1 after axiotomy, comparing one eye to the other in each animal.
- [22] Table Fig. 2 shows genes which were up-regulated at day 3 after axiotomy, comparing one eye to the other in each animal.
- [23] Table Fig. 3 shows genes which were down-regulated at day 3 after axiotomy, comparing one eye to the other in each animal.
- [24] Table Fig. 4 shows genes which were up-regulated at day 7 after axiotomy, comparing one eye to the other in each animal.
- [25] Table Fig. 5 shows genes which were down-regulated at day 7 after axiotomy, comparing one eye to the other in each animal.
- [26] Table Fig. 6 shows genes which were up-regulated at day 14 after axiotomy, comparing one eye to the other in each animal.

- [27] Table Fig. 7 shows genes which were down-regulated at day 14 after axiotomy, comparing one eye to the other in each animal.
- [28] Table Fig. 8 shows genes whose expression was modulated using tests AF, AS, BF, and BS. These tests compared treated rats with a single axiotomy to control rats with no axiotomy. AS: SAM test after normalization; AF: F test after normalization; BS: SAM test before normalization; BF: F test before normalization.
- [29] Table Fig. 9 shows the names of genes whose numbers are referenced in Table Figure 8.
- (4) Delete paragraphs 50 and 51 and replace them with:
- [50] One optic nerve on each rat was severed. Gene expression was assessed using arrays of probes for genes as shown in Table Figure 9. By comparing right to left eye, genes were identified that were either up or down regulated at various times after axotomy. See Tables Figures 1-7.
- [51] By comparing expression in treated and non-treated rats genes were identified whose expression was modulated relative to the control animals. These are identified in Table Figure 8. These genes can be used similarly to those identified in Tables Figures 1-7 in any of the methods of the present invention
- (5) Insert Tables 1-9 after paragraph [51].

Table 1. Genes down-regulated at day 1 after axiotomy.

geneID	geneName
10	androgen binding protein
23	plasma kallikrein (rPK)
62	Lim-2; embryonic motor neuron topographic organizer, HOMEODOMAIN PROTEIN LIM-2 (LIM/HOMEODOMAIN PROTEIN LHX5).
95	DCC; netrin receptor; immunoglobulin gene superfamily member; former tumor suppressor protein candidate
122	N-myc proto-oncogene protein
161	M-phase inducer phosphatase 2 (MPI2); cell division control protein 25 B (CDC25B)
177	von ebner's gland protein 2; VEG protein 2; VEGP2 + von ebner's gland protein 1; VEG protein 1; VEGP1; VEGP
210	synaptobrevin 1 (SYB1); vesicle-associated membrane protein 1 (VAMP1)
211	3-methylcholanthrene-inducible cytochrome P450 (P450MC); cytochrome P450 IA1 (CYPIA1)
225	cytochrome P450 VII (CYP7); cholesterol 7-alpha-monooxygenase; cholesterol 7-alpha-hydroxylase
227	cyclic nucleotide-activated channel, olfactory
239	cytochrome P450 2E1 (CYP2E1); P450-J; P450RLM6
245	high affinity L-proline transporter
282	neuronal acetylcholine receptor protein alpha-3 chain precursor
284	sodium channel I
285	voltage-dependent L-type calcium channel alpha 1C subunit (CACNA1); cardiac muscle L-type calcium channel alpha 1 polypeptide isoform 1 (CCHL1A1); rat brain class C (RBC); CACH2; CACN2
290	ATPase, hydrogen-potassium, alpha 2a subunit
297	sodium channel, amiloride sensitive, alpha subunit; SCNEA; alpha NACH; SCNN1A; RENAC;
298	cardiac specific sodium channel alpha subunit
299	potassium channel protein CDRK
310	neuronal acetylcholine receptor protein alpha 5 subunit precursor (CHRNA5; ACRA5)
311	sodium channel SHRSPhD, gamma subunit, epithelial
312	sodium channel protein 6 (SCP6)
323	renal organic anion transporter (ROAT1) + multispecific organic anion transporter (OAT1)
324	neuronal acetylcholine receptor protein alpha 6 subunit precursor (CHRNA6; ACRA6)
325	purinergic receptor P2X3, ligand-gated ion channel
327	calcium channel, alpha 1 beta
328	sodium channel, beta 1 subunit
338	neuronal acetylcholine receptor protein alpha 7 subunit precursor (CHRNA7; ACRA7)
339	neuronal nicotinic acetylcholine receptor alpha 2 subunit
340	proton gated cation channel drasic; sensory neuron specific
347	channel-inducing factor precursor (CHIF); corticosteroid-induced protein
348	MYELIN BASIC PROTEIN S (MBP S)
351	organic cation transporter 2 (OCT2)
354	ASIC1 proton gated cation channel
367	glycine receptor alpha 3 subunit precursor (GLRA3)
368	voltage-gated K+ channel protein; RK5; potassium channel protein
381	voltage-activated calcium channel alpha-1 subunit (RBE-II); nickel-sensitive T-type calcium channel alpha-1 subunit
382	inward rectifier potassium channel subfamily J member 2 (KCNJ2); RBL-IRK1
589	eeK proto-oncogene, protein tyrosine kinase, eph/elk-related
590	prostaglandin D2 receptor
591	activin receptor type I precursor (ACVR1; ACTR1); serine/threonine-protein kinase receptor R1

	(SKR1); TGF-B superfamily receptor type I (TSR-I); ACVRLK2
592	calcitonin receptor precursor (CT-R); C1A/C1B
593	prostaglandin E2 receptor EP2 subtype (PGE receptor EP2 subtype; PTGER2); prostanoid EP2 receptor
600	NEUREXIN I-BETA PRECURSOR,Non-processed neurexin I-beta Synaptic cell surface proteins + NEUREXIN I-ALPHA PRECURSOR,Non-processed neurexin I-alpha Synaptic cell surface proteins
602	gastrin-releasing peptide precursor (GRP); neuromedin C
605	serotonin receptor; 5-hydroxytryptamine 6 receptor (5-HT-6); ST-B17; possesses high affinity for tricyclic psychotropic drugs
606	platelet activating factor receptor
608	alpha 2B adrenergic receptor (ADRA2B); alpha 2B adrenoceptor
610	VASOACTIVE INTESTINAL POLYPEPTIDE RECEPTOR 2 PRECURSOR (VIP-R-2) (PITUITARY ADENYLATE CYCLASE ACTIVATING POLYPEPTIDE TYPE III RECEPTOR) (PACAP TYPE III RECEPTOR) (PACAP-R-3).
616	transforming growth factor beta 3 (TGF-beta3); antiproliferative growth factor
620	vasopressin V1b receptor
621	prostaglandin E2 receptor EP4 subtype
622	alpha 2C adrenergic receptor (ADRA2C); alpha 2C adrenoceptor
623	vasopressin/arginine receptor, V1a
634	prostaglandin F2 alpha receptor
635	growth hormone secretagogue receptor 1 (GHSR)
636	cholecystokinin receptor
641	NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT
643	P2U PURINOCEPTOR 1 (ATP RECEPTOR) (P2U1) (PURINERGIC RECEPTOR).
646	estrogen receptor beta (ER-beta); ESR2; NR3A2
647	kappa-type opioid receptor (KOR-1)
648	lutropin-choriogonadotropic hormone receptor
649	beta 1 adrenergic receptor (ADRB1R)
650	5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
651	adrenergic receptor, beta 2
655	muscarinic acetylcholine receptor M3 (MACHR)
660	B1 bradikinin receptor
661	mu opioid receptor (MUOR1); mu-type opioid receptor (MOR-1); opioid receptor B
662	serotonin 5HT2 receptor
664	somatostatin receptor 2
692	melatonin receptor
704	somatostatin receptor
707	galanin receptor 1
720	neuromedin B receptor
725	transmembrane receptor UNC5H1.
748	pancreatic polypeptide receptor PP1
789	interleukin-2 (IL-2)
857	somatostatin
969	luteinizing hormone, alpha
1169	mast cell protease 1 precursor (RMCP-1)

Table 2. Genes up-regulated at day 3 after axiotomy.

geneID	geneName
50	microglobulin; beta-2-microglobulin + prostaglandin receptor F2a
70	glutathione S-transferase Yb subunit; GST subunit 4 mu (GSTM2)
142	vascular cell adhesion protein 1 precursor (V-CAM 1)
316	gamma-aminobutyric acid (GABA) transporter 2
672	VGF8A protein precursor
860	Transforming growth factor beta (TGF-beta) masking protein large subunit
869	erythropoietin precursor (EPO)
972	protein arginine N-methyltransferase-1

Table 3. Genes down-regulated at day 3 after axiotomy.

geneID	geneName
24	prostatic secretory protein probasin (M-40)
30	E-selectin precursor; endothelial leukocyte adhesion molecule 1 (ELAM-1); leukocyte-endothelial cell adhesion molecule 2 (LECAM2); CD62E
48	Protein kinase C-binding protein beta15; RING-domain containing
57	kidney band 3 anion exchange protein; SLC4A1; AE1
58	L-selectin precursor; lymph node homing receptor; leukocyte adhesion molecule-1 (LAM-1); LY-22; lymphocyte surface MEL-14 antigen; leukocyte-endothelial cell adhesion molecule 1 (LECAM1); CD62L
80	Wilms' tumor protein (WT1); tumor suppressor
88	CD28, T-cell surface antigen
96	c-fgr proto-oncogene
101	CD3, gamma chain
106	cathepsin E
150	S-myc proto-oncogene protein; myc-related
215	G protein-activated inward rectifier potassium channel 4 (GIRK4); inward rectifier potassium channel subfamily J member 5 (KCNJ5); heart KATP channel; KATP-1; cardiac inward rectifier (CIR); KIR3.4
268	fructose (glucose) transporter
312	sodium channel protein 6 (SCP6)
328	sodium channel, beta 1 subunit
329	sodium-hydrogen exchange protein-isoform 2 (NHE-2)
331	PMCA; ATP2B2; calcium-transporting ATPase plasma membrane (brain isoform 2; EC 3.6.1.38); calcium pump
332	ATPase, sodium/potassium, gamma subunit
333	G protein-activated inward rectifier potassium channel 1 (GIRK1); inward rectifier potassium channel subfamily J member 3 (KCNJ3); KGA; KGB1; KIR3.1
340	proton gated cation channel drasic; sensory neuron specific
342	sodium channel 2, brain
346	ATPase, copper-transporting, Menkes protein
347	channel-inducing factor precursor (CHIF); corticosteroid-induced protein
350	synaptotagmin II
458	carbonic anhydrase 4
592	calcitonin receptor precursor (CT-R); C1A/C1B
637	vasopressin V2 receptor
650	5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
682	gamma-aminobutyric acid receptor alpha 4 subunit precursor (GABA(A) receptor; GABRA4)
694	vitamin D3 receptor (VDR); 1,25-dihydroxyvitamin D-3 receptor; NR1I1

697	muscarinic acetylcholine receptor M5 (CHRM5)
704	somatostatin receptor
707	galanin receptor 1
728	granulocyte-macrophage colony-stimulating factor (GM-CSF); colony- stimulating factor (CSF)
758	guanylyl cyclase (membrane form)
760	parathyroid hormone receptor PTH2
762	galanin receptor 2
777	5-hydroxytryptamine (serotonin) receptor 2B
937	guanine nucleotide-binding protein G(I)/G(S)/G(O) gamma-7 subunit (GNG7; GNGT7)
983	adenylyl cyclase 4
1028	protein kinase C-binding protein nel homolog 1
1080	phospholipase C beta 3 (PLC-beta 3)
1085	tissue-type plasminogen activator (t-PA)
1165	NVP; neural visinin-like Ca2+-binding protein , VISININ-LIKE PROTEIN 1 (VILIP-1) (NEURAL VISININ-LIKE PROTEIN 1) (NVL-1) (NVP-1) (21 KD CABP).

Table 4. Genes up-regulated at day 7 after axiotomy.

geneID	geneName
131	signal transducer & activator of transcription 3 (STAT3)
430	ceruloplasmin precursor (CP); ferroxidase
558	clusterin (CLU); testosterone-repressed prostate message 2 (TRPM2); apolipoprotein J; sulfated glycoprotein 2 (SGP2); dimeric acid glycoprotein (DAG)
939	heparin-binding growth factor 2 precursor (HBGF2); basic fibroblast growth factor (BFGF); fibroblast growth factor 2 (FGF2); prostatropin

Table 5. Genes down-regulated at day 7 after axiotomy.

geneID	geneName
17	T-cell receptor CD3 zeta subunit
44	P-selectin precursor; granule membrane protein 140 (GMP-140); PADGEM; CD62P; leukocyte-endothelial cell adhesion molecule 3 (LECAM3)
45	T-cell receptor gamma subunit
57	kidney band 3 anion exchange protein; SLC4A1; AE1
58	L-selectin precursor; lymph node homing receptor; leukocyte adhesion molecule-1 (LAM-1); LY-22; lymphocyte surface MEL-14 antigen; leukocyte-endothelial cell adhesion molecule 1 (LECAM1); CD62L
71	myelin P0 protein precursor; MPZ
157	MAL; T-lymphocyte maturation-associated protein; myelin protein MVP17
165	ErbB3 EGF receptor-related proto-oncogene; HER3
185	CD 30L receptor; lymphocyte activation antigen CD30; Ki-1 antigen; CD30 precursor
198	zinc transporter (ZnT-1)
203	CCHB3; calcium channel (voltage-gated; DIHYDROPYRIDINE-SENSITIVE L-TYPE, CALCIUM CHANNEL BETA-3 SUBUNIT.
207	water channel aquaporin 3 (AQP3)
211	3-methylcholanthrene-inducible cytochrome P450 (P450MC); cytochrome P450 1A1 (CYPIA1)
220	sodium/potassium-transporting ATPase beta 1 subunit (ATP1B1)
254	glucose transporter 3
256	ATP-sensitive inward rectifier potassium subfamily J member 8 (KCNJ8); UKATP-1; ATP-sensitive

	inwardly rectifying K <sup>+</sup> channel KIR6.1
265	RIM; Rab3 effector in synaptic-vesicle fusion
282	neuronal acetylcholine receptor protein alpha-3 chain precursor
283	purinergic receptor P2X5, ligand-gated ion channel
284	sodium channel I
323	renal organic anion transporter (ROAT1) + multispecific organic anion transporter (OAT1)
324	neuronal acetylcholine receptor protein alpha 6 subunit precursor (CHRNA6; ACRA6)
328	sodium channel, beta 1 subunit
329	sodium-hydrogen exchange protein-isoform 2 (NHE-2)
331	PMCA; ATP2B2; calcium-transporting ATPase plasma membrane (brain isoform 2; EC 3.6.1.38); calcium pump
334	fibrinogen beta subunit (FGB)
352	sulfonylurea receptor (SUR)
367	glycine receptor alpha 3 subunit precursor (GLRA3)
379	multidrug resistance protein 2 (MDR2); P-glycoprotein (PGY2)
383	potassium channel, voltage gated, KV3.4; RAW3; KCNC4
386	sodium/chloride cotransporter, thiazide sensitive
491	synaptosomal associated protein 25; SNAP-25; SNAP; SNAP25; SUP
592	calcitonin receptor precursor (CT-R); C1A/C1B
598	gamma-aminobutyric acid (GABA-A) receptor, beta 1 subunit
600	NEUREXIN I-BETA PRECURSOR, Non-processed neurexin I-beta Synaptic cell surface proteins + NEUREXIN I-ALPHA PRECURSOR, Non-processed neurexin I-alpha Synaptic cell surface proteins
608	alpha 2B adrenergic receptor (ADRA2B); alpha 2B adrenoceptor
609	neuropeptide Y receptor type 1
621	prostaglandin E2 receptor EP4 subtype
622	alpha 2C adrenergic receptor (ADRA2C); alpha 2C adrenoceptor
624	c-ErbA oncogene; thyroid hormone receptor alpha-1 (THRA1)
626	gamma-aminobutyric acid receptor alpha 2 subunit precursor (GABA(A) receptor; GABRA2)
629	P2Y PURINOCEPTOR 6 (P2Y6)
639	glutamate receptor 1 precursor (GluR-1); GluR-A; GluR-K1
640	gamma-aminobutyric acid receptor alpha 3 subunit precursor (GABA(A) receptor; GABRA3)
641	NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT
643	P2U PURINOCEPTOR 1 (ATP RECEPTOR) (P2U1) (PURINERGIC RECEPTOR).
650	5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
753	glycine receptor, alpha 2A subunit, inhibitory
760	parathyroid hormone receptor PTH2
761	5-hydroxytryptamine 5A receptor (5HT5A; HTR5A); serotonin receptor; REC17
766	acetylcholine receptor alpha
968	brain natriuretic peptide (BNP); 5-kDa cardiac natriuretic peptide; ISO-ANP
969	luteinizing hormone, alpha
971	cocaine/amphetamine-induced rat transcript, CART
1028	protein kinase C-binding protein nel homolog 1
1096	14-3-3 protein eta; PKC inhibitor protein-1; KCIP-1
1133	plectin
1165	NVP; neural visinin-like Ca <sup>2+</sup> -binding protein, VISININ-LIKE PROTEIN 1 (VILIP-1) (NEURAL VISININ-LIKE PROTEIN 1) (NVL-1) (NVP-1) (21 KD CABP).

Table 6. Genes up-regulated at day 14 after axiotomy.

geneID	geneName
1103	plasminogen activator inhibitor 2A

Table 7. Genes down-regulated at day 14 after axiotomy.

geneID	geneName
2	syndecan 3
13	ras-GTPase-activating protein (GAP); ras p21 protein activator; p120GAP
18	interleukin-6 receptor beta chain; membrane glycoprotein gp130
24	prostatic secretory protein probasin (M-40)
40	A-raf proto-oncogene
64	prothymosin-alpha (PTMA)
86	cadherin 6 precursor; kidney-cadherin (K-cadherin)
125	neurofibromin; neurofibromatosis protein type I (NF1); GTPase stimulatory protein
152	c-H-ras proto-oncogene; transforming G-protein p21
153	HSP84; HSP90-beta; heat shock 90kD protein
170	Neural adhesion molecule F3, RAT NEURAL ADHESION MOLECULE F3, COMPLETE CDS.
184	BIG-1 PROTEIN PRECURSOR; neural cell adhesion protein; neurite outgrowth-promotor
200	potassium channel protein; KSHIIIA3
201	ATP-sensitive inward rectifier potassium channel subfamily J member 1 (KCNJ1); KAB-1; KIR1.1; ROMK1
236	Band 3 (B3RP3), 3 Cl-HCO3-anion exchanger
243	voltage-gated potassium channel protein KV1.1; RBK1; RCK1; KCNA1
258	potassium channel, inward rectifier 9
275	taurine transporter
282	neuronal acetylcholine receptor protein alpha-3 chain precursor
284	sodium channel I
299	potassium channel protein CDRK
324	neuronal acetylcholine receptor protein alpha 6 subunit precursor (CHRNA6; ACRA6)
327	calcium channel, alpha 1 beta
328	sodium channel, beta 1 subunit
331	PMCA; ATP2B2; calcium-transporting ATPase plasma membrane (brain isoform 2; EC 3.6.1.38); calcium pump
403	17-kDa ubiquitin-conjugating enzyme E2 (UBE2B); ubiquitin-protein ligase; ubiquitin carrier protein; HR6B
491	synaptosomal associated protein 25; SNAP-25; SNAP; SNAP25; SUP
499	67-kDa glutamic acid decarboxylase (GAD67); GAD1
589	eeek proto-oncogene, protein tyrosine kinase, eph/elk-related
596	D(1A) DOPAMINE RECEPTOR
604	growth hormone receptor precursor (GH receptor; GHR); serum-binding protein
641	NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT
650	5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
652	thyroid hormone beta receptor; c-erbA-beta
654	gamma-aminobutyric acid (GABA-A) receptor, beta 3 subunit
681	glutamate receptor 2 precursor (GLUR-2; GLUR-B; GLUR-K2)
709	glutamate receptor 4 precursor (GLUR-4; GLUR-D)



734	cannabinoid receptor 1, neuronal
745	neuromedin K receptor (NKR); neurokinin B receptor; NK-3 receptor (NK-3R)
751	GABA-A receptor gamma-2 subunit precursor
762	galanin receptor 2
901	insulin-like growth factor binding protein 1 precursor (IGFBP-1; IBP-1)
913	presomatotropin
932	protein kinase C beta-I type (PKC-beta I) + protein kinase C beta-II type (PKC-beta II)
951	guanine nucleotide-binding protein G(O) alpha subunit (GNAO; GNA0)
965	guanine nucleotide-binding protein G(I) alpha 1 subunit (GNAI1); adenylate cyclase-inhibiting G alpha protein
976	serine/threonine kinase PCTAIRE2 (PCTK2)
1028	protein kinase C-binding protein nel homolog 1
1054	PKI-alpha; cAMP-dependent protein kinase inhibitor (muscle/brain form)
1096	14-3-3 protein eta; PKC inhibitor protein-1; KCIP-1
1165	NVP; neural visinin-like Ca <sup>2+</sup> -binding protein, VISININ-LIKE PROTEIN 1 (VILIP-1) (NEURAL VISININ-LIKE PROTEIN 1) (NVL-1) (NVP-1) (21 KD CABP).

Table 8. Genes whose expression was modulated using tests AF, AS, BF, and BS.

AS	AF	BS	BF		AS	AF	BS	BF		AS	AF	BS	BF
5	5				506	506					805		
	8	8	8			507					812		
13	13	13	13					520		814	814	814	814
		20	20		528	528		528		824	824		824
106	106	106				533				844	844	844	844
107	107	107	107			545		545		858	858	858	858
			123			548				873	873	873	873
	175					558					892		
183	183					559	559	559		899		899	
185					562	562				911	911	911	
	195		195		563	563				915	915	915	915
197	197							568		917	917	917	917
203	203	203	203			571					922		922
220	220					572						925	
238	238				590					928			
248	248				604	604	604	604		931	931	931	931
	261				605					936		936	936
262	262	262	262		621					939		939	
	275				628	628	628	628		942		942	
295	295	295	295		644	644	644	644		943	943	943	
	296		296		647	647	647			953	953		
301	301				650	650	650	650		956	956	956	956
	303				661	661	661	661		964	964	964	964
309	309	309	309		673	673	673	673		966	966		
	317		317				675					970	
328	328	328	328		678	678	678	678			974		
354	354	354	354		679	679	679	679		980	980		
355	355	355	355		689	689	689	689		982	982	982	982
357	357				691		691			996	996	996	996
	358		358		699	699				1018			
	373				703	703	703	703		1028	1028	1028	1028
	374				714		714			1062	1062		
374	383		383		715	715	715	715			1088		1088
	407		407		717		717			1096	1096	1096	1096
	411				720	720	720	720		1103	1103	1103	1103
423	423				728	728	728	728		1118			
436	436	436	436				729			1123	1123	1123	
437	437	437	437		730		730				1135	1135	1135
438	438	438	438		741					1147		1147	1147
439	439				742	742	742			1151	1151	1151	1151
	453		453		754	754	754			1155	1155	1155	1155
464	464	464	464		758	758	758	758		1165	1165	1165	1165
477	477	477	477		770	770	770			1169	1169	1169	1169
478	478				774								1173
480	480				776	776	776	776					
	482				784	784	784	784					
	493				794	794	794	794					
505	505	505	505		798	798							
AS	AF	BS	BF		AS	AF	BS	BF		AS	AF	BS	BF
5	5				506	506					805		

Table 9. Names of genes whose numbers are referenced in Table 8.

geneID	gene name
1	glypican-1 precursor; HSPG M12; nervous system cell-surface heparan sulfate proteoglycan
2	syndecan 3
3	protocadherin 4
4	tumor necrosis factor receptor 1 precursor (TNFR1)
5	glutamyl aminopeptidase A
6	LIM domain protein CLP36, homologous to rat RIL
7	G1/S-specific cyclin D1 (CCND1)
8	proliferating cell nuclear antigen (PCNA); cyclin
9	antigen peptide transporter 2; TAP2L; APT2; TAP2; MTP2
10	androgen binding protein
11	fos-related antigen 1 (FOSL1; FRA1)
12	transforming growth factor alpha (TGFA); EGF-like TGF; ETGF
13	ras-GTPase-activating protein (GAP); ras p21 protein activator; p120GAP
14	multidrug resistance protein (MRP)
15	rat CD1 antigen precursor
16	CD44 antigen precursor; phagocytic glycoprotein I (PGP-1); HUTCH-I; extracellular matrix receptor-III (ECMR-III); GP90 lymphocyte homing/adhesion receptor; hermes antigen; hyaluronate receptor; LY-24
17	T-cell receptor CD3 zeta subunit
18	interleukin-6 receptor beta chain; membrane glycoprotein gp130
19	NK lymphocyte receptor; NKR-P1B
20	LIM, muscle
21	G1/S-specific cyclin D2 (CCND2); vin-1 proto-oncogene
22	prohibitin (PHB); B-cell receptor-associated protein 32 (BAP32)
23	plasma kallikrein (rPK)
24	prostatic secretory protein probasin (M-40)
25	p21; cip1; waf1
26	Crk adaptor protein (CRK-II alternative splice variant); proto-oncogene c-crk
27	Sky proto-oncogene; Tyro3; Rse; Dtk
28	thioredoxin peroxidase 1 (TDPX1); thioredoxin-dependent peroxide reductase 1; thiol-specific antioxidant protein (TSA)
29	leukocyte common antigen precursor (LCA); CD45 antigen; T200; PTPRC
30	E-selectin precursor; endothelial leukocyte adhesion molecule 1 (ELAM-1); leukocyte-endothelial cell adhesion molecule 2 (LECAM2); CD62E
31	T-cell surface glycoprotein CD5 precursor; lymphocyte glycoprotein LY-1 (LYT1)
32	interleukin-6 receptor alpha precursor (IL-6R-alpha; IL6R)
33	Myc-Max-interacting tumor suppressor (MXI1)
34	Gax, growth-arrest-specific protein
35	G1/S-specific cyclin D3 (CCND3)
36	growth arrest and DNA-damage-inducible protein 45 (GADD45)
37	natural killer (NK) cell protease 1 (RNKP-1)
38	p53 nuclear oncoprotein
39	BTG1 protein; anti-proliferative factor
40	A-raf proto-oncogene
41	c-ros-1 proto-oncogene
42	glutathione S-transferase Ya subunit (GST YA); ligandin subunit 1 alpha
43	integrin-associated protein form 4
44	P-selectin precursor; granule membrane protein 140 (GMP-140); PADGEM; CD62P; leukocyte-endothelial cell adhesion molecule 3 (LECAM3)

45	T-cell receptor gamma subunit
46	interleukin-2 receptor alpha subunit precursor (IL-2 receptor alpha; IL2RA); TAC antigen; CD25 antigen
47	fos-related antigen 2 (FRA2); FOSL2
48	Protein kinase C-binding protein beta15; RING-domain containing
49	G1/S-specific cyclin E (CCNE)
50	microglobulin; beta-2-microglobulin + prostaglandin receptor F2a
51	natural killer (NK) cell protease 4 (RNKP-4)
52	maspin; protease inhibitor 5 (PI5); tumor suppressor
53	rac-beta serine/threonine kinase (rac-PK-beta); AKT2
54	casein kinase II beta subunit (CKII; CSNK2B; CK2N); phosvitin
55	Mas proto-oncogene; G-protein coupled receptor; Mas-1
56	microsomal glutathione S-transferase (GST12; MGST1)
57	kidney band 3 anion exchange protein; SLC4A1; AE1
58	L-selectin precursor; lymph node homing receptor; leukocyte adhesion molecule-1 (LAM-1); LY-22; lymphocyte surface MEL-14 antigen; leukocyte-endothelial cell adhesion molecule 1 (LECAM1); CD62L
59	B7.1
60	urokinase receptor + GPI-anchored form urokinase plasminogen activator surface receptor (PLAUR: UPAR); CD87
61	Jun-B; c-jun-related transcription factor
62	Lim-2; embryonic motor neuron topographic organizer, HOMEODOMAIN PROTEIN LIM-2 (LIM/HOMEODOMAIN PROTEIN LHX5).
63	G2/M-specific cyclin G (CCNG)
64	prothymosin-alpha (PTMA)
65	34A transformation-associated protein; TAP-related matrix metalloproteinase 10 (MMP10); stromelysin 2 (SL2); transin 2
66	Von Hippel-Lindau tumor suppressor protein (VHL)
67	Nm23-M2; nucleoside diphosphate kinase B; metastasis-reducing protein; c-myc-related transcription factor, NUCLEOSIDE DIPHOSPHATE KINASE A (EC 2.7.4.6) (NDK A) (NDP KINASE A) (TUMOR METASTATIC PROCESS-ASSOCIATED PROTEIN) (METASTASIS INHIBITION FACTOR NM23
68	Pim-1 proto-oncogene
69	NF-2; moesin-ezrin-radixin-like protein (MERLIN); shwannomin; neurofibromatosis type 2 susceptibility protein
70	glutathione S-transferase Yb subunit; GST subunit 4 mu (GSTM2)
71	myelin P0 protein precursor; MPZ
72	ecto-ATPase precursor; cell-CAM 105 (C-CAM 105); ATP-dependent taurocolate-carrier protein; GP110
73	leukocyte surface antigen CD53; leukocyte antigen MRC-OX44; cell surface glycoprotein CD53
74	signal transducer CD24 precursor; heat stable antigen (HSA); nectadrin
75	Jun-D; c-jun-related transcription factor
76	growth arrest and DNA-damage-inducible protein 153 (GADD153)
77	cyclin-dependent kinase 2 alpha (CDK2-alpha) + cyclin-dependent kinase 2-beta (CDK2-beta)
78	inducible nitric oxide synthase (iNOS); type II NOS
79	matrix metalloproteinase 14 precursor (MMP14); membrane-type matrix metalloproteinase 1 (MT-MMP1)
80	Wilms' tumor protein (WT1); tumor suppressor
81	NDK-B; nucleoside diphosphate kinase B; metastasis-reducing protein; c-myc-related transcription factor (18 kDa subunit), NUCLEOSIDE DIPHOSPHATE KINASE B (EC 2.7.4.6) (NDK B) (NDP KINASE B) (P18).
82	c-raf proto-oncogene; raf-1

83	MSH2 DNA mismatch repair protein
84	glutathione S-transferase subunit 5 theta (GST5-5)
85	annexin V (ANX5); lipocortin 5; placental anticoagulant protein I (PAP-I); endonexin II; calphobindin I (CBP-I); PP4; thromboplastin inhibitor; vascular anticoagulant alpha (VAC-alpha); anchorin CII
86	cadherin 6 precursor; kidney-cadherin (K-cadherin)
87	CD4 homologue, W3/25 antigen
88	CD28, T-cell surface antigen
89	Max; c-myc dimerization partner & coactivator
90	DNA-binding protein inhibitor ID1
91	cyclin-dependent kinase 7 (CDK7); CDK-activating kinase (CAK); 39-kDa protein kinase; homolog of Xenopus MO15
92	cytosolic phospholipase A2 (CPLA2); phosphatidylcholine 2-acylhydrolase; lysophospholipase; PLA2G4
93	proteasome delta subunit precursor; macropain delta; multicatalytic endopeptidase complex delta; proteasome subunit Y; proteasome subunit 5; PSMB6
94	c-fos proto-oncogene
95	DCC; netrin receptor; immunoglobulin gene superfamily member; former tumor suppressor protein candidate
96	c-fgr proto-oncogene
97	adenomatous polyposis coli protein (APC)
98	glutathione S-transferase P subunit; GST subunit 7 pi (GST7-7)
99	CD9, surface glycoprotein, platelet
100	short type PB-cadherin
101	CD3, gamma chain
102	advanced glycosylation end product-specific receptor precursor (AGER); receptor for advanced glycosylation end products (RAGE)
103	cAMP-response element binding protein 1 (CREBP1)
104	Id-2; DNA-binding protein inhibitor; HLH protein
105	GAK; cyclinG-associated kinase
106	cathepsin E
107	proteasome subunit R-ring12
108	c-myc proto-oncogene
109	Neogenin, DCC netrin receptor-related protein; immunoglobulin gene superfamily member; former tumor suppressor protein candidate
110	fyn proto-oncogene; p59fyn
111	p130; retinoblastoma gene product-related protein Rb2/p130; cell cycle regulator
112	liver carboxylesterase 10 precursor; carboxylesterase ES-10; PI 6.1 esterase; ES-HVEL
113	integral membrane protein E16 (TA1); L-type amino acid transporter 1
114	integrin, alpha 1
115	CD8, 37 kDa membrane protein, thymocyte
116	CD2, membrane glycoprotein, T-cell marker
117	I-kB (I-kappa B) alpha chain; RL/IF-1 gene product
118	Id-3; DNA-binding protein inhibitor; HLH protein
119	p58/GTA; galactosyltransferase associated protein kinase (cdc2-related protein kinase)
120	interferon-induced GTP-binding, mx1
121	proteasome component C13 precursor; macropain subunit C13; multicatalytic endopeptidase complex subunit C13; PSMB8
122	N-myc proto-oncogene protein
123	c-kit proto-oncogene
124	rac-alpha serine/threonine kinase (RAC-PK-alpha); protein kinase B (PKB); AKT1
125	neurofibromin; neurofibromatosis protein type I (NF1); GTPase stimulatory protein
126	glutathione S-transferase subunit 13

127	NEUROGLYCAN C PRECURSOR; membrane-spanning chondroitin sulfate proteoglycan; restricted to the brain
128	cadherin; proton-driven peptide transporter
129	BST-1; bone marrow stromal antigen 1; lymphocyte differentiation antigen CD38; ADP-ribosyl cyclase 2
130	scavenger receptor class B type I
131	signal transducer & activator of transcription 3 (STAT3)
132	elongation factor SIII P15 subunit
133	p27Kip1
134	interferon-induced GTP-binding protein mx2 + interferon-induced GTP-binding protein mx3
135	apolipoprotein A-I precursor (APO-AI)
136	c-jun proto-oncogene; transcription factor AP-1; RJG-9
137	basic fibroblast growth factor receptor 1 precursor (BFGF-R); MFR; FGFR1; FLG
138	c-mos, proto-oncogene
139	heat shock 27-kDa protein (HSP27)
140	epididymal secretory glutathione peroxidase
141	AMPHOTROPIC MURINE RETROVIRUS RECEPTOR.
142	vascular cell adhesion protein 1 precursor (V-CAM 1)
143	cationic amino acid transporter-1 (CAT-1); system Y+ basic amino acid transporter; ecotropic retroviral leukemia receptor; ecotropic retrovirus receptor (ERR)
144	transferrin receptor protein; p90; CD71
145	NF-kappa-B transcription factor p105 subunit (NFKB p105); NF-kappa-B1 P84; NF-kappa-B1 P98 (NFKB1); DNA-binding factor KBF1; EBP-1
146	Clk3 protein kinase; cdc2/CDC28-like
147	cyclin-dependent kinase 4 inhibitor B (CDKN2B); p14-INK4B; p15-INK5B
148	ATPase, transitional endoplasmic reticulum
149	apolipoprotein A-IV precursor (APO-AIV)
150	S-myc proto-oncogene protein; myc-related
151	erbB2 receptor protein-tyrosine kinase precursor; p185ERBB2; neu proto-oncogene; epidermal growth factor receptor- related protein
152	c-H-ras proto-oncogene; transforming G-protein p21
153	HSP84; HSP90-beta; heat shock 90kD protein
154	phospholipid hydroperoxide glutathione peroxidase
155	fibronectin receptor beta subunit precursor; integrin beta 1
156	receptor protein-tyrosine phosphatase zeta/beta (R-PTP-Z)
157	MAL; T-lymphocyte maturation-associated protein; myelin protein MVP17
158	Non-processed neurexin III-alpha, NEUREXIN III-ALPHA, ISOFORM D PRECURSOR
159	CREB active transcription factor; transcription activator protein
160	MeCP-2; methyl-CpG DNA-binding protein 2
161	M-phase inducer phosphatase 2 (MPI2); cell division control protein 25 B (CDC25B)
162	glucose-regulated 78-kDa protein (GRP78); BiP; immunoglobulin heavy chain binding protein; steroidogenesis-activator polypeptide; HSPA5
163	insulin-like growth factor binding protein, complex acid-labile subunit
164	c-ets-1 proto-oncogene protein; p54
165	ErbB3 EGF receptor-related proto-oncogene; HER3
166	c-N-ras proto-oncogene; transforming G-protein p21
167	heat shock 60-kDa protein (HSP60); 60-kDa chaperonin (CPN60); GroEL homolog; mitochondrial matrix protein P1; p60 lymphocyte protein
168	glutathione S-transferase, Yrs-Yrs inactivating
169	integrin beta 4 precursor
170	Neural adhesion molecule F3, RAT NEURAL ADHESION MOLECULE F3, COMPLETE CDS.
171	fasl receptor; fas antigen precursor; Apo-1 antigen

172	SR13 myelin protein; peripheral myelin protein 22 (PMP-22); CD25 protein
173	interferon regulatory factor 1 (IRF1)
174	G2/M-specific cyclin B1 (CCNB1)
175	RCL; c-Myc-responsive gene, growth-related
176	Regenerating protein III (reg III). PANCREATITIS-ASSOCIATED PROTEIN 2 PRECURSOR (LITHOSTATHINE 3) (ISLET OF LANGERHANS REGENERATING PROTEIN 3) REG 3
177	von ebner's gland protein 2; VEG protein 2; VEGP2 + von ebner's gland protein 1; VEG protein 1; VEGP1; VEGP
178	cysteine-rich protein 2 (CRP2); ESP1
179	trk, proto-oncogene, precursor
180	c-K-ras 2b proto-oncogene; transforming G-protein p21
181	heat shock 70-kDa protein (HSP70)
182	glutathione transferase, subunit 8
183	platelet glycoprotein IV (GPIV); GPIIIB; CD36 antigen; fatty acid translocase (FAT); PAS4; adipocyte membrane protein
184	BIG-1 PROTEIN PRECURSOR; neural cell adhesion protein; neurite outgrowth-promotor
185	CD 30L receptor; lymphocyte activation antigen CD30; Ki-1 antigen; CD30 precursor
186	ADP-RIBOSYL CYCLASE 1 (EC 3.2.2.5) (CYCLIC ADP-RIBOSE HYDROLASE 1) (CADPR HYDROLASE 1) (CD38-HOMOLOGOUS PROTEIN) (CD38H).
187	New England Deaconess transcription factor
188	G1/S-specific cyclin C (CCNC)
189	p55cdc; cell division control protein 20
190	antigen peptide transporter 1
191	apolipoprotein D
192	Rb; pp105; retinoblastoma susceptibility-associated protein; tumor suppressor gene; cell cycle regulator
193	platelet-derived growth factor B-chain (PDGFb ); c-sis
194	rab8, ras related GTPase
195	major vault protein (MVP)
196	NADPH-cytochrome P450 reductase (CPR); POR
197	P450 IB1; C3H cytochrome P450; CYP1B1
198	zinc transporter (ZnT-1)
199	sodium channel SHRSPHD, beta subunit, epithelial
200	potassium channel protein; KSHIIIA3
201	ATP-sensitive inward rectifier potassium channel subfamily J member 1 (KCNJ1); KAB-1; KIR1.1; ROMK1
202	chloride channel CIC-1, skeletal muscle
203	CCHB3; calcium channel (voltage-gated; DIHYDROPYRIDINE-SENSITIVE L-TYPE, CALCIUM CHANNEL BETA-3 SUBUNIT.
204	beta-alanine-sensitive neuronal GABA transporter; sodium- & chloride-dependent GABA transporter 3
205	sodium/phosphate cotransporter 1
206	potassium-transporting ATPase alpha subunit; proton pump; gastric H+/K+ ATPase alpha subunit (HKA); ATP4A
207	water channel aquaporin 3 (AQP3)
208	water channel integral protein chip 28k
209	syntaxin A
210	synaptobrevin 1 (SYB1); vesicle-associated membrane protein 1 (VAMP1)
211	3-methylcholanthrene-inducible cytochrome P450 (P450MC); cytochrome P450 IA1 (CYP1A1)
212	BRAIN DIGOXIN CARRIER PROTEIN
213	5-hydroxytryptamine (serotonin) receptor 3; 5HT3

214	G-protein activated K <sup>+</sup> inward rectifier
215	G protein-activated inward rectifier potassium channel 4 (GIRK4); inward rectifier potassium channel subfamily J member 5 (KCNJ5); heart KATP channel; KATP-1; cardiac inward rectifier (CIR); KIR3.4
216	chloride channel CIC-2
217	sodium-dependent serotonin transporter; 5HT transporter (5HTT)
218	fibroblast ADP/ATP carrier protein; ADP/ATP translocase 2; adenine nucleotide translocator 2 (ANT2)
219	glucose transporter, sodium-dependent, SGLT2
220	sodium/potassium-transporting ATPase beta 1 subunit (ATP1B1)
221	peptide/histidine transporter
222	water channel, kidney collecting duct
223	synaptotagmin V
224	synaptobrevin 2 (SYB2); vesicle-associated membrane protein 2 (VAMP2)
225	cytochrome P450 VII (CYP7); cholesterol 7-alpha-monooxygenase; cholesterol 7-alpha-hydroxylase
226	glucose transporter type 1 (erythrocyte/brain)
227	cyclic nucleotide-activated channel, olfactory
228	chloride channel protein 3 (CLC3; CLCN3)
229	ISK slow voltage-gated potassium channel protein; mink potassium channel; KCNE1
230	potassium channel RB-IRK2, inward rectifier
231	dopamine transporter (cocaine-sensitive); sodium-dependent dopamine transporter (DAT)
232	kidney oligopeptide transporter; peptide transporter 2 (PEPT2); kidney H <sup>+</sup> /peptide cotransporter; SLC15A2
233	sodium/dicarboxylate cotransporter
234	brain calcium-transporting ATPase plasma membrane 1; calcium pump; PMCA1AB
235	cardiac delayed rectifier potassium channel protein
236	Band 3 (B3RP3), 3 Cl-HCO <sub>3</sub> -anion exchanger
237	annexin I (ANX1); lipocortin I; calpactin II; chromobindin 9; P35; phospholipase A2 inhibitory protein
238	epidermal fatty acid-binding protein (E-FABP); cutaneous fatty acid-binding protein (C-FABP); DA11; FABP5
239	cytochrome P450 2E1 (CYP2E1); P450-J; P450RLM6
240	glucose transporter protein
241	acetylcholine receptor gamma
242	chloride channel protein 5 (CLCN5; CLC5)
243	voltage-gated potassium channel protein KV1.1; RBK1; RCK1; KCNA1
244	potassium channel, inward rectifier 11
245	high affinity L-proline transporter
246	renal sodium-dependent phosphate transport protein 2; sodium/phosphate cotransporter 2; renal Na <sup>+</sup> -dependent phosphate cotransporter 2; SLC17A2
247	sodium/calcium exchanger NCX3
248	sodium/potassium-transporting ATPase beta 2 subunit (ATP1B2)
249	aquaporin (pancreas & liver; AQP 8)
250	organic anion transporter
251	SYNAPTOTAGMIN XI; membrane trafficking protein
252	fatty acid-binding protein (liver; L-FABP); Z-protein; squalene- & sterol-carrier protein (SCP); P14
253	cytochrome P450 1A2 (CYPIA2); P450-D; P448 + cytochrome P450 ISF/BNF-G
254	glucose transporter 3
255	acetylcholine receptor delta
256	ATP-sensitive inward rectifier potassium subfamily J member 8 (KCNJ8); UKATP-1; ATP-



	sensitive inwardly rectifying K <sup>+</sup> channel KIR6.1
257	skeletal muscle sodium channel protein alpha subunit (SCN4A); MU-1
258	potassium channel, inward rectifier 9
259	sodium/bile acid cotransporter; sodium/taurocholate cotransporting polypeptide (NTCP); SLC10A1
260	gamma-aminobutyric acid transporter 1 (GABT1; GAT1); sodium- & chloride-dependent GABA transporter 1; SLC6A1
261	neurotransmitter transporter, sodium dependent
262	calcium-transporting ATPase 3; calcium pump; SERCA3; ATP2A3
263	urea transporter
264	urate transporter/channel
265	RIM; Rab3 effector in synaptic-vesicle fusion
266	fatty acid-binding protein (heart; H-FABP)
267	cytochrome P450 4B1 (CYP4B1); P450-isozyme 5
268	fructose (glucose) transporter
269	ATP ligand gated ion channel
270	voltage gated potassium channel; kv43
271	voltage-dependent L-type calcium channel alpha 1D subunit (CACNA1D); L-type calcium channel alpha 1 polypeptide isoform 2 (CCHL1A2); rat brain class D (RBD); CACH3; CACN4
272	potassium channel-like protein KATP2, beta cell
273	cationic amino acid transporter 3
274	sodium/hydrogen exchange protein 1
275	taurine transporter
276	potassium-transporting ATPase beta subunit (ATP4B); proton pump; gastric H <sup>+</sup> /K <sup>+</sup> ATPase beta subunit
277	voltage-gated sodium channel (atypical)
278	ATP synthase lipid-binding protein P1 precursor; ATPase protein 9; ATP5G1
279	lipocortin 2
280	fatty acid-binding protein (intestinal; I-FABP; FABPI)
281	cytochrome P-450 14 DM???? + sterol 14-demethylase pseudogene
282	neuronal acetylcholine receptor protein alpha-3 chain precursor
283	purinergic receptor P2X5, ligand-gated ion channel
284	sodium channel I
285	voltage-dependent L-type calcium channel alpha 1C subunit (CACNA1); cardiac muscle L-type calcium channel alpha 1 polypeptide isoform 1 (CCHL1A1); rat brain class C (RBC); CACH2; CACN2
286	potassium channel Kir6.2, inward rectifier, ATP-sensitive
287	glycine transporter
288	sodium/hydrogen exchange protein 3
289	glutamate transporter, sodium-dependent, high-affinity (EAAT4)
290	ATPase, hydrogen-potassium, alpha 2a subunit
291	vesicular acetylcholine transporter RVAT
292	ATP synthase, subunit c, P2 gene
293	amphiphysin II (AMPH2)
294	nonspecific lipid-transfer protein precursor (NSL-TP); sterol carrier protein 2 (SCP2); sterol carrier protein X (SCPX)
295	copper-zinc-containing superoxide dismutase 1 (Cu-Zn SOD1)
296	degenerin channel MDEG; amiloride-sensitive brain sodium channel BNAC1 (BNC1)
297	sodium channel, amiloride sensitive, alpha subunit; SCNEA; alpha NACH; SCNN1A; RENAC;
298	cardiac specific sodium channel alpha subunit
299	potassium channel protein CDRK

300	chloride channel CIC-7
301	monocarboxylate transporter MCT1
302	sodium/hydrogen exchange protein 4
303	SYNAPTIC VESICLE PROTEIN 2B
304	ATPase, calcium, brain
305	aquaporin 7 (AQP7)
306	myelin proteolipid protein (PLP); DM-20; lipophilin
307	intrinsic factor precursor (INF; IF); gastric intrinsic factor (GIF)
308	adipocyte fatty acid-binding protein (AFABP; FABP4); adipocyte lipid-binding protein (ALBP)
309	plasma glutathione peroxidase precursor (GSHPX-P; GPX3); selenoprotein
310	neuronal acetylcholine receptor protein alpha 5 subunit precursor (CHRNA5; ACRA5)
311	sodium channel SHRSPHD, gamma subunit, epithelial
312	sodium channel protein 6 (SCP6)
313	calcium channel, L-type, dihydropyridine-sensitive, alpha 2 subunit
314	potassium channel, voltage gated, KV3.1; RAW2; KV4; NGK2; KCNC1
315	sodium dependent sulfate transporter
316	gamma-aminobutyric acid (GABA) transporter 2
317	sodium-glucose cotransporter 1
318	ATPase, sodium/potassium, alpha(+) isoform catalytic subunit
319	anion exchange protein 2 (AE2); non-erythroid band 3-like protein (B3RP); SLC4A2
320	myelin-associated glycoprotein precursor (L-MAG/S-MAG); brain neuron cytoplasmic protein 3
321	low-density lipoprotein receptor-related protein 2 precursor (LDL receptor; LRP2); megalin; glycoprotein 330
322	testis lipid-binding protein (TLBP); 15-kDa perforatorial protein (PERF15); FABP9
323	renal organic anion transporter (ROAT1) + multispecific organic anion transporter (OAT1)
324	neuronal acetylcholine receptor protein alpha 6 subunit precursor (CHRNA6; ACRA6)
325	purinergic receptor P2X3, ligand-gated ion channel
326	voltage-dependent P/Q-type calcium channel alpha-1A subunit (CACNA1A); L type calcium channel alpha-1 polypeptide isoform 4 (CACNL1A4; CACH4); brain calcium channel I; rat brain brain class A (RBA-1); CACN3
327	calcium channel, alpha 1 beta
328	sodium channel, beta 1 subunit
329	sodium-hydrogen exchange protein-isoform 2 (NHE-2)
330	glutamate/aspartate transporter, cochleae
331	PMCA; ATP2B2; calcium-transporting ATPase plasma membrane (brain isoform 2; EC 3.6.1.38); calcium pump
332	ATPase, sodium/potassium, gamma subunit
333	G protein-activated inward rectifier potassium channel 1 (GIRK1); inward rectifier potassium channel subfamily J member 3 (KCNJ3); KGA; KGB1; KIR3.1
334	fibrinogen beta subunit (FGB)
335	Amphiphysin; Amph1
336	synaptotagmin I
337	kidney specific organic anion transporter OAT-K1
338	neuronal acetylcholine receptor protein alpha 7 subunit precursor (CHRNA7; ACRA7)
339	neuronal nicotinic acetylcholine receptor alpha 2 subunit
340	proton gated cation channel drasic; sensory neuron specific
341	sodium channel SCN2B, beta 2 subunit, brain
342	sodium channel 2, brain
343	proton-coupled dipeptide cotransporter
344	sodium/chloride neurotransmitter transporter
345	sulfonylurea receptor

346	ATPase, copper-transporting, Menkes protein
347	channel-inducing factor precursor (CHIF); corticosteroid-induced protein
348	MYELIN BASIC PROTEIN S (MBP S)
349	Sec1; syntaxin binding protein 1; UNC-18A; UNC-18-1; N-SEC1; RBSEC1
350	synaptotagmin II
351	organic cation transporter 2 (OCT2)
352	sulfonylurea receptor (SUR)
353	P2X purinoceptor 2; ATP receptor P2X2; purinergic receptor
354	ASIC1 proton gated cation channel
355	potassium channel drk1, delayed rectifier
356	potassium channel RCK3, subunit, putative
357	GluT and GluT-R glutamate transporter
358	sodium/calcium exchanger NCX2
359	Na <sup>+</sup> /K <sup>+</sup> ATPase alpha 1 subunit
360	multidrug resistance protein (MDR1); P-glycoprotein (PGY1)
361	water channel, aquaporin 4, mercurial-insensitive
362	synapsin 2A
363	synaptotagmin IV (SYT4)
364	synaptotagmin III (SYT3)
365	organic cation transporter 1A (OCT1A)
366	cyclic nucleotide-gated channel, olfactory
367	glycine receptor alpha 3 subunit precursor (GLRA3)
368	voltage-gated K <sup>+</sup> channel protein; RK5; potassium channel protein
369	potassium channel RCK2
370	potassium channel RCK4, subunit, putative
371	liver Na <sup>+</sup> /Cl <sup>-</sup> betaine/GABA transporter
372	sodium-potassium-chloride cotransporter, bumetanide-sensitive
373	Na,K-ATPase beta 3 subunit
374	synaptic vesicle protein 2 (SV2)
375	water channel, aquaporin 5
376	annexin IV(ANX4); lipocortin IV;36-kDa zymogen granule membrane-associated protein (ZAP36)
377	synapsins IA & IB (SYN1)
378	syntaxin 3 (STX3)
379	multidrug resistance protein 2 (MDR2); P-glycoprotein (PGY2)
380	purinergic receptor P2X4, ligand-gated ion channel
381	voltage-activated calcium channel alpha-1 subunit (RBE-II); nickel-sensitive T-type calcium channel alpha-1 subunit
382	inward rectifier potassium channel subfamily J member 2 (KCNJ2); RBL-IRK1
383	potassium channel, voltage gated, KV3.4; RAW3; KCNC4
384	calcium channel, beta subunit, brain
385	excitatory amino acid transporter 3 (EAAT3); sodium-dependent glutamate/aspartate transporter 3; excitatory amino-acid carrier 1 (EAAC1); SLC1A1
386	sodium/chloride cotransporter, thiazide sensitive
387	vacuolar ATP synthase 16-kDa proteolipid subunit; ATP6C; MVP; ATPL
388	synaptic vesicle amine transporter (SVAT); monoamine transporter; vesicular amine transporter 2 (VAT2)
389	fatty acid transport protein
390	epimorphin (EPIM); syntaxin 2 (STX2)
391	secretogranin II precursor (SGII; SCG2); chromogranin C (CHGC)
392	syntaxin 4 (STX4)
393	syntaxin 5 (STX5)

394	Rab GDI alpha; Rab GDP-dissociation inhibitor alpha; GDI-1
395	cytochrome B5 (CYB5)
396	mitochondrial ATP synthase D subunit; ATP5H
397	colipase precursor
398	steryl-sulfatase precursor (EC 3.1.6.2); steroid sulfatase; steryl-sulfate sulfohydrolase; arylsulfatase C (ASC)
399	3-beta-hydroxysteroid dehydrogenase/delta-5-->-4 isomerase, type 1; 3BETA-HSD I + 3-beta-hydroxysteroid dehydrogenase/delta-5-->-4 isomerase, type 2; 3BETA-HSD II + 3-beta-hydroxysteroid dehydrogenase/delta-5-->-4 isomerase, type 4; 3BETA-HSD IV
400	cytochrome P-450 4F5
401	liver arginase 1 (ARG1)
402	calmodulin (CALM; CAM)
403	17-kDa ubiquitin-conjugating enzyme E2 (UBE2B); ubiquitin-protein ligase; ubiquitin carrier protein; HR6B
404	40S ribosomal protein S17 (RPS17)
405	P2X purinoceptor 1; ATP receptor P2X1; purinergic receptor; RP-2 protein
406	c-met proto-oncogene; hepatocyte growth factor receptor
407	syntaxin 6
408	cytosolic hydroxymethylglutaryl-CoA synthase (HMG-CoA synthase; HMGCS1); 3-hydroxy-3-methylglutaryl CoA synthase
409	medium chain acyl-CoA dehydrogenase precursor (MCAD; ACADM)
410	mitochondrial ATP synthase beta subunit precursor (ATP5B)
411	acetyl-CoA carboxylase (ACC); biotin carboxylase
412	lecithin:cholesterol acyltransferase (EC 2.3.1.43; LCAT); phosphatidylcholine-sterol O-acyltransferase; phospholipid-cholesterol acyltransferase
413	cytochrome P450 2C11 (CYP2C11); P450(M-1); P450H; P450-UT-A; UT2
414	cytochrome P-450 4F6
415	glutamate-cysteine ligase catalytic subunit (GLCLC); gamma-glutamylcysteine synthetase; gamma-ECS; GCS heavy chain
416	uricase; urate oxidase (UOX)
417	calcium binding protein 2 (CABP2); endoplasmic reticulum stress protein (ERP72); protein disulfide isomerase-related protein precursor
418	Fte-1; putative v-fos transformation effector protein; yeast mitochondrial protein import homolog; 40S ribosomal protein S3A ; RPS3A
419	dC-stretch binding protein (CSBP); heterogeneous nuclear ribonucleoprotein K (HNRNP K); TUNP
420	mannose-6-phosphate/insulin-like growth factor II receptor (M6P/IGFR2)
421	syntaxin B
422	type 1 hexokinase (HK1); brain hexokinase
423	alcohol dehydrogenase A subunit; alcohol dehydrogenase class 1 (ADH1)
424	mitochondrial ATP synthase B subunit precursor; ATP5F1
425	mitochondrial carnitine O-palmitoyltransferase I liver isoform (CPT I-L)
426	fatty acid amide hydrolase
427	cytochrome P450 2A3 (CYP2A3); coumarin 7-hydroxylase
428	cytochrome P-450 2C23, arachidonic acid epoxygenase
429	mitochondrial carnitine O-palmitoyltransferase II precursor (CPT II; CPT2)
430	ceruloplasmin precursor (CP); ferroxidase
431	serine proteinase rPC7 precursor (PCSK7)
432	eukaryotic translation initiation factor 5 (EIF-5)
433	SURVIVAL OF MOTOR NEURON(RSMN)
434	platelet-derived growth factor alpha receptor (PDGFRa)
435	chromaffin granule amine transporter
436	galactoside 2-L-fucosyltransferase 1 (FUT1; FTA); alpha 1,2 fucosyltransferase 1

	(alpha(1,2)FT1); GDP-L-fucose:beta- D-galactoside 2-alpha-L-fucosyltransferase 1
437	testis-specific cytochrome C (CYCT)
438	ATP synthase, H <sup>+</sup> , alpha subunit, mitochondrial
439	brain long-chain fatty acid-CoA ligase (LACS); acyl-CoA synthetase (+ phosphatidylinositol 4-kinase?)
440	3-beta hydroxy-5-ene steroid dehydrogenase type III (3beta-HSD III; EC 1.1.1.145); steroid delta-isomerase (EC 5.3.3.1); progesterone reductase
441	cytochrome P450 3A1 (CYP3A1); P450-PCN1
442	P450 IIA1; P-450a; 3-methylcholanthrene -inducible cytochrome P450; testosterone 7-alpha-hydroxylase; P450-UT-F. + P450 IIA2
443	glutamate-cysteine ligase regulatory subunit (GLCLR); gamma-glutamylcysteine synthetase; gamma-ECS; GCS light chain
444	carbonic anhydrase III (CA3); carbonate dehydratase III
445	60S ribosomal protein L44; L36A
446	elongation factor 2 (EF2)
447	apolipoprotein B mRNA editing protein (APOBEC-1); REPR
448	vascular endothelial growth factor receptor 1 (VEGFR1); fms-related tyrosine kinase 1 (FLT1)
449	cellubrevin
450	galactoside 2-L-fucosyltransferase 2 (FUT2; FTB); alpha 1,2 fucosyltransferase 2 (alpha(1,2)FT2); GDP-L-fucose:beta- D-galactoside 2-alpha-L-fucosyltransferase 2; secretor blood group alpha-2-fucosyltransferase
451	mitochondrial hydroxymethylglutaryl-CoA synthase precursor (HMG-CoA synthase); 3-hydroxy-3-methylglutaryl-CoA synthase; HMGCS2
452	cytosolic acyl-CoA thioester hydrolase (ACT); long chain acyl-CoA hydrolase (LACH1; ACH1)
453	mitochondrial muscle carnitine O-palmitoyltransferase I(CPTI-M); carnitine palmitoyltransferase I-like protein; CPT1B
454	alcohol sulfotransferase A (EC 2.8.2.2); hydroxysteroid sulfotransferase A; STA; androsterone-sulfating sulfotransferase (AD-ST); ST-40
455	cytochrome P450 2C7 (CYP2C7); P450F; PTF1
456	arachidonate 12-lipoxygenase (12-LOX; ALOX12)
457	glutathione synthetase (GSH synthetase; GSH-S; GSS); glutathione synthase
458	carbonic anhydrase 4
459	40S ribosomal protein S12
460	mitochondrial elongation factor G precursor (MEF-G)
461	high mobility group protein 2 (HMG2)
462	BDNF/NT-3 growth factor receptor precursor; trkB tyrosine kinase; gp145-trkB/gp95-trkB; NTRK2
463	fatty acid binding protein, brain
464	fructose-bisphosphate aldolase B (ALDOB); liver-type aldolase
465	cytochrome oxidase, subunit I, Sertoli cells
466	3-ketoacyl-CoA thiolase A + 3-ketoacyl-CoA thiolase B
467	acyl-CoA dehydrogenase, short-branched-chain
468	2-hydroxyacylsphingosine 1-beta-galactosyltransferase precursor; UDP-galactose-ceramide galactosyltransferase; ceramide UDP-galactosyltransferase; cerebroside synthase
469	cytochrome P450 4A3 (CYP4A3); lauric acid omega-hydroxylase; P450-LA-omega 3
470	aldehyde dehydrogenase 2, retinaldehyde-specific
471	arginase 2
472	carbonic anhydrase 5
473	ribosomal protein S4
474	initiation factor, eukaryotic, (eIF-4E)
475	Set beta isoform + Set alpha isoform; neural plasticity-related protein
476	bone morphogenetic protein type IA receptor

477	syntaxin binding protein Munc18-2
478	fructose-bisphosphate aldolase A (ALDOA); muscle-type aldolase
479	ATPase, subunit F, vacuolar (vatf)
480	creatine kinase, ubiquitous, mitochondrial
481	bile-salt-activated lipase precursor (BAL); bile-salt-stimulated lipase (BSSL); carboxyl ester lipase; sterol esterase; cholesterol esterase; pancreatic lysophospholipase
482	phosphatidate phosphohydrolase type 2
483	cytochrome P450 4A8 (CYP4A8); P450-KP1; P450-PP1
484	lysophospholipase
485	dopa/tyrosine sulfotransferase
486	11-beta-hydroxysteroid dehydrogenase 2
487	ribosomal protein L11
488	eukaryotic translation initiation factor 2 alpha subunit (EIF-2-alpha)
489	high mobility group protein 1; amphoterin; heparin binding protein P30; HMG1; HMG-1
490	transforming growth factor beta receptor type 1 precursor (TGF-beta receptor type 1; TGFBR1; TGFR1); serine/threonine-protein kinase receptor R4 (SKR4)
491	synaptosomal associated protein 25; SNAP-25; SNAP; SNAP25; SUP
492	long chain acyl-CoA synthetase 2 (LACS2); liver long chain fatty acid-CoA ligase (FACL2)
493	cytochrome c oxidase, subunit VIa, heart
494	sterol 26-hydroxylase mitochondrial precursor (EC 1.14.-.-); vitamin D(3) 25-hydroxylase; 5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol 27-hydroxylase
495	perilipin A/B (PERIA/PERIB); lipid droplet-associated proteins A/B
496	squalene monooxygenase; squalene epoxidase (SQLE; SE); ERG1
497	cytochrome P450 2C22 (CYP2C22); P450 MD; P450 P49
498	mitochondrial adenylate kinase 2 (AK2); ATP/AMP transphosphorylase
499	67-kDa glutamic acid decarboxylase (GAD67); GAD1
500	gamma-aminobutyric acid (GABA) transaminase
501	ribosomal protein L13
502	bcl-2-associated death promoter (BAD)
503	TGF-beta receptor type III; betaglycan; candidate tumor suppressor gene
504	epidermal growth factor receptor (EGF receptor; EGFR)
505	Huntingtin associated 1B
506	aldolase C
507	cytochrome c oxidase, subunit IV, mitochondrial
508	fatty acid synthase
509	3-oxo-5-alpha-steroid 4-dehydrogenase 2; steroid 5-alpha-reductase 2 (SR type 2)
510	annexin III (ANX3); lipocortin 3; placental anticoagulant protein III (PAP-III); 35-alpha calcimedin
511	cytochrome P-450 4F1, hepatic tumour
512	adenylate kinase 1 (AK1); ATP/AMP transphosphorylase; myokinase
513	glutamic acid decarboxylase (GAD65)
514	aldehyde dehydrogenase 2, mitochondrial, liver
515	ribosomal protein L10
516	BAX-alpha
517	KDR/flk1 vascular endothelial growth factor tyrosine kinase receptor (VEGFR2)
518	transforming growth factor-beta II receptor precursor (TGF-beta II receptor; TGFBR2)
519	synaptophysin, p38
520	testis fructose-6-phosphate 2-kinase/fructose 2,6-biphosphate (testis 6PF-2-K/fru-2,6-P2ase); 6-phosphofructo- 2-kinase; fructose-2,6-bisphosphatase
521	cytochrome c oxidase, subunit Va, mitochondrial
522	pancreatic lipase related protein 2 precursor; secretory glycoprotein GP-3
523	20-alpha-hydroxysteroid dehydrogenase; 20-alpha-HSD; HSD1)
524	cytochrome P450 17 (CYP17); P450C17; CYPXVII; steroid 17-alpha-hydroxylase/17,20 lyase

525	cytochrome P-450 4F4
526	thymidylate synthase (TYMS; TS)
527	glutathione reductase
528	alkaline phosphatase
529	ribosomal protein L12
530	bcl-2
531	low-affinity nerve growth factor receptor precursor (NGF receptor; NGFR); GP80-LNGFR; P75 ICD
532	insulin-like growth factor I receptor alpha subunit (IGF-I-R alpha)
533	NEURODEGENERATION ASSOCIATED PROTEIN 1; downregulated by axotomy
534	sucrase isomaltase
535	cytochrome c oxidase, subunit VIIa
536	hormone sensitive lipase (EC 3.1.1.-; HSL)
537	lipoprotein lipase precursor (LPL)
538	aldehyde dehydrogenase 3, microsomal
539	cytochrome P-450 2J3
540	cytosolic thymidine kinase (TK1)
541	long chain-specific acyl-CoA dehydrogenase precursor (LCAD; ACADL)
542	dopamine beta-hydroxylase
543	S19; 40S ribosomal protein S19
544	bcl-x; bcl2-L1
545	erythropoietin receptor precursor (EPOR)
546	Rek4 Eph-related receptor tyrosine kinase; ephrin type-A receptor 3; EphA3; similar to Etk1
547	ras-related protein rab1A
548	fructose-16-bisphosphatase, liver
549	cytochrome c oxidase, subunit VIIIh
550	triacylglycerol lipase precursor (hepatic)
551	corticosteroid 11-beta-dehydrogenase isozyme 1 (11-DH); 11-beta-hydroxysteroid dehydrogenase 1 (11-beta-HSD1)
552	squalene synthetase, hepatic
553	cytochrome P-450 3A9, olfactory
554	adenylate kinase 3
555	very long chain acyl-CoA dehydrogenase precursor (VLCAD)
556	acetylcholinesterase, T subunit, glycolipid-anchored
557	60S ribosomal protein L21
558	clusterin (CLU); testosterone-repressed prostate message 2 (TRPM2); apolipoprotein J; sulfated glycoprotein 2 (SGP2); dimeric acid glycoprotein (DAG)
559	fibroblast growth factor receptor subtype 4
560	EHK1; ephrin type-A receptor 5 (EPA5); EPH-related tyrosine kinase
561	rab13, ras related GTPase
562	neuron-specific enolase (NSE); gamma enolase (EC 4.2.1.11); 2-phospho-D-glycerate hydrolyase
563	glucose-6-phosphate dehydrogenase
564	triacylglycerol lipase precursor (pancreatic)
565	cytochrome P450 XIA1 mitochondrial precursor (CYP11A1); P450scc; cholesterol side-chain cleavage enzyme; cholesterol desmolase
566	3-oxo-5-alpha-steroid 4-dehydrogenase 1 (SRD5A1); steroid 5-alpha-reductase 1 (SR type 1)
567	cytochrome P-450 4A1
568	cAMP-dependent protein kinase type I-alpha regulatory chain
569	short chain acyl-CoA dehydrogenase precursor (SCAD; ACADS); butyryl-CoA dehydrogenase
570	NADP+ alcohol dehydrogenase; aldehyde reductase (ALR); 3-dG-reducing enzyme
571	60S ribosomal protein L19 (RPL19)

572	activator of apoptosis harakiri (HRK); neuronal death protein 5 (DP5); BID3
573	RET ligand 1 (RET1)
574	Ehk 3; ephrin type-A receptor 7; tyrosine kinase (Eph-related); EphA7
575	rab GDI, beta species, ras related GTPase
576	cytochrome c oxidase subunit Vb & VIa precursor (COX5B)
577	mitochondrial hydroxymethylglutaryl-CoA lyase precursor (HMG-CoA lyase; HMGCL; HL); 3-hydroxy-3-methylglutaryl CoA lyase
578	serine phospholipid-specific phospholipase A; PS-PLA1 precursor
579	arachidonate 5-lipoxygenase (EC 1.13.11.34); 5-lipoxygenase (5-LO)
580	cytochrome P-450 19; aromatase
581	2-arylpropionyl-CoA epimerase; alpha-methylacyl-CoA racemase
582	DOPA decarboxylase (DDC); aromatic-L-amino-acid decarboxylase (EC 4.1.1.28)
583	acyl-CoA oxidase
584	nitric oxide synthase 3
585	40S ribosomal protein S11
586	Huntington disease gene homolog
587	RET ligand 2 (RET2)
588	erbB4, proto-oncogene, neuregulin receptor
589	eeek proto-oncogene, protein tyrosine kinase, eph/elk-related
590	prostaglandin D2 receptor
591	activin receptor type I precursor (ACVR1; ACTR1); serine/threonine-protein kinase receptor R1 (SKR1); TGF-B superfamily receptor type I (TSR-I); ACVRLK2
592	calcitonin receptor precursor (CT-R); C1A/C1B
593	prostaglandin E2 receptor EP2 subtype (PGE receptor EP2 subtype; PTGER2); prostanoid EP2 receptor
594	5-hydroxytryptamine 2C receptor (5HT2C; 5HT1C; HTR1C); serotonin receptor
595	neurotensin receptor type 2
596	D(1A) DOPAMINE RECEPTOR
597	gamma-aminobutyric-acid receptor delta subunit precursor (GABA(A) receptor)
598	gamma-aminobutyric acid (GABA-A) receptor, beta 1 subunit
599	acetylcholine receptor, nicotinic, alpha 4
600	NEUREXIN I-BETA PRECURSOR,Non-processed neurexin I-beta Synaptic cell surface proteins + NEUREXIN I-ALPHA PRECURSOR,Non-processed neurexin I-alpha Synaptic cell surface proteins
601	glutamate receptor, metabotropic 3
602	gastrin-releasing peptide precursor (GRP); neuromedin C
603	platelet-derived growth factor receptor, alpha
604	growth hormone receptor precursor (GH receptor; GHR); serum-binding protein
605	serotonin receptor; 5-hydroxytryptamine 6 receptor (5-HT-6); ST-B17; possesses high affinity for tricyclic psychotropic drugs
606	platelet activating factor receptor
607	thyrotropin releasing hormone receptor
608	alpha 2B adrenergic receptor (ADRA2B); alpha 2B adrenoceptor
609	neuropeptide Y receptor type 1
610	VASOACTIVE INTESTINAL POLYPEPTIDE RECEPTOR 2 PRECURSOR (VIP-R-2) (PITUITARY ADENYLATE CYCLASE ACTIVATING POLYPEPTIDE TYPE III RECEPTOR) (PACAP TYPE III RECEPTOR) (PACAP-R-3).
611	GABA-A receptor rho-1 subunit precursor
612	gamma-aminobutyric acid (GABA-A) receptor, gamma 1 subunit
613	acetylcholine receptor beta
614	Non-processed neurexin II-beta major, NEUREXIN II-BETA-A PRECURSOR + Non-processed neurexin II-alpha, NEUREXIN II-ALPHA-B PRECURSOR
615	P2Y purinoceptor



616	transforming growth factor beta 3 (TGF-beta3); antiproliferative growth factor
617	c-fms proto-oncogene; macrophage colony stimulating factor 1 (MCSF-1) receptor
618	insulin receptor precursor (INSR; IR)
619	D(2) dopamine receptor
620	vasopressin V1b receptor
621	prostaglandin E2 receptor EP4 subtype
622	alpha 2C adrenergic receptor (ADRA2C); alpha 2C adrenoceptor
623	vasopressin/arginine receptor, V1a
624	c-ErbA oncogene; thyroid hormone receptor alpha-1 (THRA1)
625	GABA-B receptor 1a (GABA-BR1A receptor) + GABA-B receptor 1b (GABA-BR1B receptor)
626	gamma-aminobutyric acid receptor alpha 2 subunit precursor (GABA(A) receptor; GABRA2)
627	NMDAR2B; GLUTAMATE (NMDA) RECEPTOR SUBUNIT EPSILON 2 PRECURSOR (N-METHYL D-ASPARTATE RECEPTOR SUBTYPE 2B) (NR2B)
628	INOSITOL TRIPHOSPHATE RECEPTOR SUBTYPE 3
629	P2Y PURINOCEPTOR 6 (P2Y6)
630	leukemia inhibitory/cholinergic neuronal differentiation factor (LIF/DIF)
631	endothelin 1 receptor precursor; ETA; EDNRA
632	leptin receptor precursor (LEPR); OB receptor (OBR); FA
633	D(4) dopamine receptor; D(2C) dopamine receptor
634	prostaglandin F2 alpha receptor
635	growth hormone secretagogue receptor 1 (GHSR)
636	cholecystokinin receptor
637	vasopressin V2 receptor
638	RXR-beta cis-11-retinoic acid receptor; nuclear receptor co-regulator 1
639	glutamate receptor 1 precursor (GluR-1); GluR-A; GluR-K1
640	gamma-aminobutyric acid receptor alpha 3 subunit precursor (GABA(A) receptor; GABRA3)
641	NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT
642	inositol triphosphate receptor, type 2 (ITPR2)
643	P2U PURINOCEPTOR 1 (ATP RECEPTOR) (P2U1) (PURINERGIC RECEPTOR).
644	tumor necrosis factor alpha precursor (TNF-alpha; TNFA); cachectin
645	LCR-1; putative chemokine and HIV coreceptor homolog; G protein-coupled receptor
646	estrogen receptor beta (ER-beta); ESR2; NR3A2
647	kappa-type opioid receptor (KOR-1)
648	lutropin-choriogonadotropic hormone receptor
649	beta 1 adrenergic receptor (ADRB1R)
650	5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
651	adrenergic receptor, beta 2
652	thyroid hormone beta receptor; c-erbA-beta
653	ionotropic kainate 3 glutamate receptor precursor (GRIK3); glutamate receptor 7 (GLUR7)
654	gamma-aminobutyric acid (GABA-A) receptor, beta 3 subunit
655	muscarinic acetylcholine receptor M3 (MACHR)
656	PKC-eta; protein kinase C eta type
657	neuropilin 2
658	glial cell line-derived neurotrophic factor precursor
659	C5a anaphylatoxin chemotactic receptor (C5AR; C5R1)
660	B1 bradikinin receptor
661	mu opioid receptor (MUOR1); mu-type opioid receptor (MOR-1); opioid receptor B
662	serotonin 5HT2 receptor
663	prostaglandin E2 receptor EP3 subtype (PGE receptor EP3 subtype; PTGER3); prostanoid EP3 receptor
664	somatostatin receptor 2

665	5-hydroxytryptamine (serotonin) receptor 5B; 5HT5b
666	mineralocorticoid receptor (MR)
667	neuronal acetylcholine receptor protein beta 2 subunit precursor (non-alpha 1; CHRNA2; ACRB2)
668	gamma-aminobutyric acid (GABA-A) receptor, gamma 3 subunit
669	muscarinic acetylcholine receptor M2
670	coagulation factor II (thrombin) receptor (CF2R); thrombin receptor precursor
671	heat-stable enterotoxin receptor precursor; intestinal guanylate cyclase (GUCY2C; GUC2C); STA receptor
672	VGF8A protein precursor
673	endothelin receptor ET-B
674	angiotensin/vasopressin receptor (AII/AVP)
675	substance P receptor (SPR); tachykinin receptor; NK-1 receptor (NK-1R)
676	thyroid stimulating hormone receptor
677	type 2 angiotensin II receptor (AGTR2; AT2)
678	opioid receptor-like orphan receptor
679	vasoactive intestinal peptide 1 receptor
680	glucocorticoid receptor
681	glutamate receptor 2 precursor (GLUR-2; GLUR-B; GLUR-K2)
682	gamma-aminobutyric acid receptor alpha 4 subunit precursor (GABA(A) receptor; GABRA4)
683	muscarinic acetylcholine receptor M4 (CHRM4)
684	metabotropic glutamate receptor kinase (MGLUR1; G-protein coupled); metabotropic glutamate receptor 1 precursor
685	very low-density lipoprotein receptor precursor (VLDL receptor)
686	glia maturation factor beta (GMF-beta; GMFB)
687	G-protein coupled receptor, putative, GPR41
688	atrial natriuretic peptide clearance receptor precursor (ANP-C; ANPRC; NPR3; NPR-C)
689	brain cholecystokinin/gastrin receptor; gastrin/cholecystokinin type B receptor; CCK-B receptor (CCK-BR)
690	gonadotropin releasing hormone receptor
691	thromboxane A2 receptor (TBXA2R; TXR2); prostanoid TP receptor
692	melatonin receptor
693	glucagon-like peptide 1 receptor; GLP-1 receptor
694	vitamin D3 receptor (VDR); 1,25-dihydroxyvitamin D-3 receptor; NR1I1
695	glutamate receptor 3 precursor (GLUR-3; GLUR-C; GLUR-K3)
696	gamma-aminobutyric acid receptor alpha 5 subunit precursor (GABA(A) receptor; GABRA5)
697	muscarinic acetylcholine receptor M5 (CHRM5)
698	glutamate metabotropic receptor 8 (MGLUR8)
699	low-density lipoprotein receptor precursor (LDL receptor; LDLR)
700	beta-nerve growth factor precursor (beta-NGF)
701	interleukin-2 receptor beta chain
702	insulin receptor 1
703	delta-type opioid receptor (DOR-1); opioid receptor A
704	somatostatin receptor
705	alpha 1B adrenergic receptor; alpha 1B-adrenoceptor (ADRA1B)
706	5-hydroxytryptamine (serotonin) receptor 4; 5-HT4L
707	galanin receptor 1
708	retinoid X receptor alpha (RXR alpha; RXRA); NR2B1
709	glutamate receptor 4 precursor (GLUR-4; GLUR-D)
710	gamma-aminobutyric acid receptor alpha 6 subunit precursor (GABA(A) receptor; GABRA6)
711	glycine receptor (GlyR) alpha-1 chain precursor (48 kDa); strychnine binding subunit
712	metabotropic glutamate receptor 6 precursor

713	asialoglycoprotein receptor R2/3 (ASGPR); hepatic lectin 2/3; RHL-2
714	granulocyte colony stimulating factor
715	interleukin-4 receptor
716	somatostatin receptor 1 (SS1R; SSTR1); SRIF-2
717	substance K receptor (SKR); neurokinin A receptor; NK-2 receptor
718	calcium-independent alpha-latrotoxin receptor
719	prostaglandin E2 receptor EP1 subtype (PGE receptor EP1; PTGER1); prostanoid EP1 receptor
720	neuromedin B receptor
721	melatonin-related receptor
722	thyroid hormone receptor ErbA-beta-2, pituitary specific
723	gastric inhibitory polypeptide receptor precursor (GIP-R); glucose- dependent insulinotropic polypeptide receptor
724	gamma-aminobutyric acid (GABA-A) receptor, pi subunit
725	transmembrane receptor UNC5H1.
726	glutamate metabotropic receptor 2 (mGluR2)
727	protachykinin alpha precursor (alpha-PPT); substance P + protachykinin beta precursor (beta-PPT); substance P; neurokinin A; substance K; neuromedin L; neuropeptide K + protachykinin gamma precursor; substance P
728	granulocyte-macrophage colony-stimulating factor (GM-CSF); colony- stimulating factor (CSF)
729	interleukin-1 receptor type I (IL-1R-1); P80
730	cholecystokinin
731	gastrin-releasing peptide receptor (GRP-R); GRP-preferring bombesin receptor
732	alpha 1C -adrenergic receptor
733	somatostatin receptor 5 (SSTR5; SS5R)
734	cannabinoid receptor 1, neuronal
735	neuropeptide Y5 receptor
736	androgen receptor
737	GABA-A receptor beta-2 subunit precursor
738	gamma-aminobutyric acid (GABA-A) receptor, rho 2
739	transmembrane receptor UNC5H2.
740	metabotropic glutamate receptor 5 precursor (MGLUR5; GRM5)
741	nociceptin precursor; orphanin FQ; PPNOC; ORL1 receptor agonist precursor; endogenous agonist of opioid receptor-like ORL1 receptor
742	macrophage inflammatory protein-2 precursor
743	fos-responsive related to IL-1 receptor Fit-1M
744	glycerol kinase (GK); glycerokinase; ATP:glycerol 3-phosphotransferase; ATP-stimulated glucocorticoid-receptor translocation promoter (ASTP)
745	neuromedin K receptor (NKR); neurokinin B receptor; NK-3 receptor (NK-3R)
746	corticotropin-releasing factor receptor subtype 2 (CRF2R)
747	5-hydroxytryptamine 1F receptor (5HT1F; HTR1F); serotonin receptor
748	pancreatic polypeptide receptor PP1
749	melanocortin receptor 4
750	Nur77 early response protein; NGF-I; nerve growth factor induced protein I-B (NGFI-B); nuclear receptor
751	GABA-A receptor gamma-2 subunit precursor
752	glutamate receptor, ionotropic, kainate 5
753	glycine receptor, alpha 2A subunit, inhibitory
754	G protein-coupled receptor 27; gustatory receptor 27 (GUST27)
755	neuropeptide Y precursor (NPY)
756	fibroblast growth factor 10 precursor (FGF10)
757	interleukin 8 receptor

758	guanylyl cyclase (membrane form)
759	alpha-1D adrenergic receptor (ADRA1D); alpha 1D-adrenoceptor; alpha-1A adrenergic receptor (ADRA1A); RA42
760	parathyroid hormone receptor PTH2
761	5-hydroxytryptamine 5A receptor (5HT5A; HTR5A); serotonin receptor; REC17
762	galanin receptor 2
763	somatostatin receptor 3
764	NOR-1; member of thyroid/steroid receptor superfamily
765	glutamate [NMDA] receptor subunit epsilon 3 precursor; N-methyl-D-aspartate receptor subunit 2C (NMDAR2C; NR2C); GRIN2C
766	acetylcholine receptor alpha
767	NEURONAL PENTRAXIN RECEPTOR
768	metabotropic glutamate receptor 7 precursor (GRM7; MGLUR7)
769	NEUROKININ B PRECURSOR (NEUROMEDIN K)
770	platelet-derived growth factor A-chain (PDGF-A)
771	galanin precursor (GALN; GAL)
772	activin type receptor
773	glucagon receptor precursor (GL-R)
774	follicle stimulating hormone receptor
775	parathyroid hormone/parathyroid hormone-related receptor 1 (PTH/PTHr receptor; PTHR1)
776	secretin receptor
777	5-hydroxytryptamine (serotonin) receptor 2B
778	N-methyl-D-aspartate receptor (NMDAR1); glutamate receptor subunit zeta 1 precursor; NR1
779	gamma-aminobutyric acid receptor alpha 1 subunit precursor (GABA(A) receptor; GABRA1)
780	acetylcholine receptor, nicotinic, epsilon, muscle
781	neuropilin
782	glutamate receptor, metabotropic 4
783	NEUROMEDIN U-23 PRECURSOR (NMU-23)
784	trombopoietin
785	insulin like growth factor II (IGF-II)
786	neurotrophin 5, trk and trkb activating
787	inhibin alpha chain precursor
788	natriuretic peptide precursor, gamma, atrial
789	interleukin-2 (IL-2)
790	corticotropin-releasing factor binding protein
791	arrestin D + guanine aminohydrolase (GAH)
792	extracellular signal-regulated kinase 1 (ERK1); mitogen-activated protein kinase 1 (MAP kinase 1; MAPK1); insulin- stimulated microtubule-associated protein-2 kinase; MNK1; PRKM3; ERT2; p44-MAPK
793	protein kinase C gamma type (PKC-gamma)
794	rhodopsin kinase
795	serine/threonine kinase PCTAIRE3 (PCTK3)
796	protein phosphatase 2C alpha (PP2C alpha; PP2C1); protein phosphatase 1A (PPM1A)
797	Ral B; GTP-binding protein
798	guanine nucleotide-binding regulatory , alpha subunit
799	heparin-binding growth associated protein
800	bone morphogenetic protein 3
801	thyroliberin precursor; thyrotropin-releasing hormone precursor (TRH)
802	thyroid stimulating hormone, beta
803	interleukin 6 (IL-6)
804	chromogranin A

805	G protein-coupled receptor kinase 5 (GRK5)
806	extracellular signal-regulated kinase 2 (ERK2); mitogen-activated protein kinase 2 (MAP kinase 2; MAPK2); p42-MAPK; ERT1
807	protein kinase C zeta type (PKC-zeta)
808	Casein kinase II (alpha subunit)
809	Pyruvate dehydrogenase kinase kinase precursor
810	serine/threonine protein phosphatase 2B catalytic subunit beta; calmodulin-dependent calcineurin A subunit beta; CAM-PRP catalytic subunit; PPP3CB
811	GTP-binding protein G(i)/G(s)/G(o) gamma-9 subunit; Ggamma8
812	Ras-related GTPase, ARF-like 1
813	insulin like growth factor I (IGF-I)
814	transforming growth factor, beta 1
815	follicle stimulating hormone beta-subunit
816	vasoactive intestinal peptide
817	interleukin-7 (IL-7)
818	NEUREXOPHILIN 1 (NEUROPHILIN)
819	c-src-kinase (CSK) & negative regulator; tyrosine-protein kinase
820	extracellular signal-regulated kinase 3 (ERK3); mitogen-activated protein kinase 3 (MAP kinase 3; MAPK3); p55-MAPK
821	PKN cell morphology-related protein kinase; homologous to PKC
822	Ctk; non-receptor protein tyrosine kinase (batk)
823	HEP; LC-PTP protein-tyrosine phosphatase; hematopoietic protein-tyrosine phosphatase (HEPTP)
824	protein phosphatase 2A, regulatory subunit B
825	transducin beta-1 subunit; GTP-binding protein G(i)/G(s)/G(t) beta subunit 1
826	GTP-binding protein (G-alpha-8), GUANINE NUCLEOTIDE-BINDING PROTEIN G(S), ALPHA SUBUNIT (ADENYLATE CYCLASE-STIMULATING).
827	vascular endothelial growth factor D (VEGF-D)
828	growth factor, schwannoma-derived
829	placental lactogen
830	preprolactin (Prl)
831	interleukin-10 (IL-10)
832	early growth response protein 1 (EGR1); nerve growth factor-induced protein A (NGFI-A)
833	Hck tyrosine-protein kinase; p56-hck; hemopoietic cell kinase
834	LIM domain serine/threonine kinase 1 (LIMK-1)
835	calcium/calmodulin-dependent protein kinase type IV (CAMK IV; catalytic chain);CAM kinase-GR
836	Rsk; ribosomal protein S6 kinase
837	Cot proto-oncogene; Tpl-2
838	protein tyrosine phosphatase, striatum enriched
839	transducin beta-2 subunit; GTP-binding protein G(i)/G(s)/G(t) beta subunit 2 (GNB2)
840	ras-related protein Rab2
841	macrophage migration inhibitory factor (MIF)
842	keratinocyte growth factor
843	prolactine like protein A (rPLP-A)
844	gonadotrophin-releasing hormone precursor
845	interleukin 13 precursor (IL-13); T-cell activation protein P600
846	gastric inhibitory polypeptide precursor (GIP; glucose-dependent insulinotropic polypeptide
847	spleen tyrosine kinase (SYK)
848	LIM domain kinase 2 (LIMK2)
849	cell adhesion kinase beta (CAK beta); calcium-dependent; FAK family
850	GSK-3 alpha; glycogen synthase kinase-3 alpha;
851	cyclin-dependent kinase 4 (CDK4); cell division protein kinase 4; PSK-J3

852	protein tyrosine phosphatase 2E1
853	guanine nucleotide-binding protein G(i)/G(s)/G(t) beta subunit 3 (GNB3); transducin beta 3 subunit
854	Rab-3a ras-related protein
855	CXC chemokine LIX
856	cytokine-induced neutrophil chemoattractant 2, beta
857	somatostatin
858	corticotropin-releasing hormone
859	interleukin-15 (IL-15)
860	Transforming growth factor beta (TGF-beta) masking protein large subunit
861	Lyn tyrosine-protein kinase
862	mitogen-activated protein kinase p38 (MAP kinase p38); CSBP2
863	G protein beta-adrenergic receptor kinase 1 (beta-ARK1; EC 2.7.1.126)
864	CamK II; calcium/calmodulin-dependent protein kinase brain type II beta
865	cyclin-dependent kinase 5 (CDK5); tau protein kinase II (TPKII) catalytic subunit; PSSALRE kinase
866	protein tyrosine phosphatase PTPase
867	ras-related protein m-ras
868	Rab-4a ras-related protein
869	erythropoietin precursor (EPO)
870	heparin-binding growth factor 1
871	somatoliberin precursor; growth hormone-releasing factor) (GRF); growth hormone-releasing hormone (GHRH).
872	inhibin, beta A subunit
873	insulin-like growth factor binding protein 2 (IGF-binding protein 2; IGFBP2; IBP2); BRL-BP
874	F-SPONDIN PRECURSOR; secreted protein; promotes neural cell adhesion and neurite extension
875	cAMP-dependent protein kinase catalytic subunit
876	dual-specificity mitogen-activated protein kinase kinase 1 (MAP kinase kinase 1; MAPKK1; extracellular signal-regulated kinase activator kinase 1 (ERK kinase 1); MEK1
877	G protein beta-adrenergic receptor kinase 2 (beta-ARK2; EC 2.7.1.126)
878	CamK I; calcium/calmodulin-dependent protein kinase type I + CaM-like protein kinase
879	cell division control protein 2 homolog (CDC2); cyclin-dependent kinase 1 (CDK1)
880	protein phosphatase 2C isoform; Mg <sup>2+</sup> dependent protein phosphatase beta isoform
881	ras associated with diabetes (RAD1)
882	Rab-3b ras-related protein
883	glia-activating factor precursor (GAF); fibroblast growth factor 9 (FGF9); HBGF9
884	bone morphogenetic protein 4
885	muscle 6-phosphofructokinase (PFKM); phosphofructokinase 1; phosphohexokinase; phosphofructo-1-kinase A
886	gastrin
887	leptin precursor; obesity factor
888	secretogranin 3 (Sg3)
889	PKR; double-stranded RNA-activated eIF-2a kinase
890	dual-specificity mitogen-activated protein kinase kinase 2 (MAP kinase kinase 2; MAPKK2; extracellular signal-regulated kinase activator kinase 2 (ERK kinase 2); MEK2
891	calcium/calmodulin-dependent protein kinase type II delta subunit (CAM- kinase II delta; CAMK-II delta; CAMK2D)
892	serum/glucocorticoid-regulated serine/threonine protein kinase (SGK)
893	wee1 tyrosine kinase
894	protein tyrosine phosphatase PTP-S
895	GTP-binding protein; G-alpha-i3; guanine nucleotide-binding protein G(K) alpha subunit (G(I) alpha-3)

896	Rab-11A; Ras p21-like small GTP-binding protein; 24KG; YL8
897	fibroblast growth factor 5 (FGF5); HBGF5
898	bone morphogenetic protein 2
899	thymosin beta-like protein
900	calcitonin
901	insulin-like growth factor binding protein 1 precursor (IGFBP-1; IBP-1)
902	Grb2; Ash-m; growth factor receptor-bound protein 2; adaptor protein; sos-ras pathway member
903	Janus tyrosine protein kinase 1 (JAK1)
904	dual-specificity mitogen-activated protein kinase kinase 5 (MAP kinase kinase 5; MAPKK5; extracellular signal-regulated kinase activator kinase 5 (ERK kinase 5); MEK5
905	phosphorylase kinase, catalytic subunit
906	MRK; serine/threonine kinase, possibly involved in cardiac development
907	PCTAIRE1; cdc2-related serine/threonine kinase
908	R-PTP-A; receptor protein-tyrosine phosphatase alpha
909	guanine nucleotide-binding protein G(I) alpha 2 subunit (GNAI2); adenylate cyclase-inhibiting G alpha protein
910	rab12, ras related GTPase
911	hepatocyte growth factor precursor (HGF); scatter factor (SF); hepatopoeitin A
912	Glioma-derived vascular endothelial cell growth factor
913	presomatotropin
914	interferon, alpha 1
915	insulin-like growth factor binding protein 3 precursor (IGFBP-3; IBP-3)
916	beta-arrestin 1
917	Jak2 tyrosine-protein kinase; Janus kinase 2
918	protein kinase C alpha type (PKC-alpha)
919	insulin receptor-related receptor-alpha (sIRR-1)
920	Casein kinase I delta; CKId; 49-kDa isoform
921	G protein-coupled receptor kinase 4 (GRK4)
922	Protein tyrosine phosphatase (OST-PTP) associated with bone and testicular differentiation receptor-type, OSTEOTESTICULAR PROTEIN TYROSINE PHOSPHATASE PRECURSOR (EC 3.1.3.48)
923	guanine nucleotide-binding protein beta subunit 5 (GNB5); transducin beta subunit 5
924	rab15, ras related GTPase
925	heparin-binding epidermal growth factor-like growth factor precursor (heparin-binding EGF-like growth factor; HBEGF; HEGFL); DTR
926	small inducible cytokine A3 precursor (SCYA3); macrophage inflammatory protein 1 alpha precursor (MIP1-alpha; MIP1A)
927	C-type natriuretic peptide precursor (CNP; NPPC)
928	Interferon gamma precursor (IFN-gamma; IFNG)
929	endothelin-1 precursor (ET-1)
930	beta-arrestin 2 (ARRB2)
931	Jak3 tyrosine-protein kinase; Janus kinase 3
932	protein kinase C beta-I type (PKC-beta I) + protein kinase C beta-II type (PKC-beta II)
933	phosphorylase kinase, alpha subunit
934	Calcium/calmodulin-dependent protein kinase kinase; phosphorylase B kinase kinase; glycogen synthase A kinase; hydroxyalkyl-protein kinase
935	Syp; SH-PTP2; adaptor protein tyrosine phosphatase
936	Purkinje cells-specific protein tyrosine phosphatase CBPTP, TYROSINE PHOSPHATASE CBPTP (EC 3.1.3.48)
937	guanine nucleotide-binding protein G(I)/G(S)/G(O) gamma-7 subunit (GNG7; GNGT7)
938	rab14, ras related GTPase
939	heparin-binding growth factor 2 precursor (HBGF2); basic fibroblast growth factor (BFGF);

	fibroblast growth factor 2 (FGF2); prostatropin
940	CC chemokine MIP3 alpha exodus
941	peptide YY precursor (PYY)
942	Interferon gamma inducing factor precursor
943	insulin-like growth factor-binding protein (rIGFBP-6)
944	arrestin C
945	c-Jun N-terminal kinase 1 (JNK1); stress-activated protein kinase gamma (SAPK-gamma)
946	protein kinase C delta type (PKC-delta)
947	casein kinase 1, gamma subunit, isoform 1
948	Mak; male germ cell-associated kinase; highly expressed at and after meiosis
949	serine/threonine protein phosphatase 2A-beta catalytic subunit (PP2A-beta; PPP2CB)
950	phosphatase 2A, catalytic subunit, isotype alpha
951	guanine nucleotide-binding protein G(O) alpha subunit (GNAO; GNA0)
952	rab16, ras related GTPase
953	neurotrophin 3 precursor (NTF3); neurotrophic factor; HDNF; nerve growth factor 2 (NGF2)
954	Fasl; Fas antigen ligand; generalized lymphoproliferation disease gene (GLD) in mice
955	melanin-concentrating hormone precursor (PMCH; MCH)
956	interleukin 1 alpha (IL-1 alpha; IL1A)
957	insulin-like growth factor-binding protein 5 precursor (IGF-binding protein 5; IGFBP5; IBP5)
958	prostaglandin F2 receptor, alpha isoform, regulatory protein
959	c-Jun N-terminal kinase 2 (JNK2); stress-activated protein kinase alpha (SAPK-alpha)
960	focal adhesion protein-tyrosine kinase (FAK)
961	phosphorylase kinase, gamma subunit
962	PAK-alpha serine/threonine kinase; p21-Cdc42/Rac1 activated kinase; p68-PAK; MUK2
963	protein phosphatase 2A-beta regulatory subunit B (55 kDa); beta-PR55
964	Rab-related GTP-binding protein
965	guanine nucleotide-binding protein G(I) alpha 1 subunit (GNAI1); adenylate cyclase-inhibiting G alpha protein
966	G protein, gamma 5 subunit
967	BTG2 protein precursor; NGF-inducible anti-proliferative protein PC3
968	brain natriuretic peptide (BNP); 5-kDa cardiac natriuretic peptide; ISO-ANP
969	luteinizing hormone, alpha
970	interleukin 1, beta
971	cocaine/amphetamine-induced rat transcript, CART
972	protein arginine N-methyltransferase 1
973	c-Jun N-terminal kinase 3 (JNK3); stress-activated protein kinase beta (SAPK-beta)
974	protein kinase C epsilon type (PKC-epsilon)
975	protein kinase II, alpha subunit, calcium/calmodulin dependent
976	serine/threonine kinase PCTAIRE2 (PCTK2)
977	nuclear tyrosine phosphatase; PRL-1; affects cell growth
978	Ral A; GTP-binding protein
979	Ras-related GTPase, ARF-like 5
980	rab26, ras related GTPase
981	rab4B, ras related GTPase
982	calcium-dependent phospholipase A2 precursor (PLA2); phosphatidylcholine 2-acylhydrolase (PLA2-10; PLA2G5)
983	adenylyl cyclase 4
984	NVP-2; neural visinin-like Ca2+-binding protein, VISININ-LIKE PROTEIN 2 (VILIP-2) (NEURAL VISININ-LIKE PROTEIN 2) (NVL-2) (NVP-2).
985	Crk-associated substrate (Cas); focal adhesion kinase substrate; p130
986	ADP-ribosylation factor 5 (ARF5)
987	trypsinogen II (anionic precursor; EC 3.4.21.4); pretrypsinogen II + trypsinogen I (anionic



	precursor; EC 3.4.21.4); pretrypsinogen I
988	mast cell protease 7 precursor (RMCP-7)
989	gelatinase A
990	proteasome iota subunit; macropain iota subunit; multicatalytic endopeptidase complex iota subunit; 27-kDa prosomal protein (PROS27); PSMA6
991	tissue inhibitor of metalloproteinase 2 (TIMP2)
992	leukocyte common antigen-related tyrosine phosphatase (LAR)
993	G protein coupled receptor, putative, GPR6
994	calponin
995	Ras-GRF (p140); sos; guanine nucleotide release/exchange factor (GNRP)
996	14-kDa phospholipase A2 precursor (PLA2); phosphatidylcholine 2-acylhydrolase (PLA2-8; PLA2G2C)
997	adenylyl cyclase type VIII (ADCY8); ATP pyrophosphate lyase; Ca <sup>2+</sup> /calmodulin-activated adenylyl cyclase
998	NVP-3; neural visinin-like Ca <sup>2+</sup> -binding protein, VISININ-LIKE PROTEIN 3 (VILIP-3) (NEURAL VISININ-LIKE PROTEIN 3) (NVL-3) (NVP-3).
999	phosphatidylinositol 3-kinase regulatory alpha subunit (PI13-kinase p85-alpha subunit; PTDINS-3-kinase p85-alpha; PI3K)
1000	ADP-ribosylation factor 6 (ARF6)
1001	neuroendocrine convertase 1 precursor (NEC 1); prohormone convertase 1 (PC1); proprotein convertase 1
1002	mast cell protease-3 precursor
1003	insulin-regulated membrane aminopeptidase vp165
1004	proteasome subunit R-zeta
1005	alpha-1-antiproteinase precursor; alpha-1-proteinase inhibitor; alpha-1 antitrypsin
1006	phosphotyrosine phosphatase 6
1007	G protein coupled receptor, putative, GPR12
1008	plakoglobin
1009	guanine nucleotide-binding protein alpha 12 subunit (G alpha 12; GNA12)
1010	interferon inducible protein 10
1011	olfactory guanylyl cyclase D precursor (GUCY2D)
1012	serine/threonine protein phosphatase 2B catalytic subunit alpha; calcineurin A subunit alpha (CALNA); CAM-PRP catalytic subunit; PPP3CA
1013	myristoylated alanine-rich C-kinase substrate (MARCKS; MACS)
1014	14-3-3 protein beta/alpha; protein kinase C inhibitor protein-1; prepronerve growth factor RNH-1; KCIP-1; YWHAB
1015	urokinase-type plasminogen activator precursor (UPA); U-plasminogen activator
1016	cathepsin D
1017	dipeptidyl-peptidase I precursor (EC 3.4.14.1; DPP-I); cathepsin C; cathepsin J; dipeptidyl transferase
1018	proteasome activator rPA28 subunit alpha
1019	pancreatic secretory trypsin inhibitor I precursor (PSTI-I); cholecystokinin-releasing peptide; monitor peptide + pancreatic secretory trypsin inhibitor II precursor (PSTI-II); caltrin; calcium transport inhibitor
1020	Receptor-linked protein tyrosine phosphatase (PTP-PS)
1021	G protein coupled receptor 19
1022	DNA topoisomerase II alpha (TOP2A)
1023	RhoGAP; p122
1024	inositol 1,4,5-triphosphate 3-kinase receptor 2 (INSP3R)
1025	DPDE1; cAMP-dependent 3',5'-cyclic phosphodiesterase 4C
1026	cAMP-dependent protein kinase type II-beta regulatory chain
1027	presenilin 2 (PSEN2; PSNL2; PS2); homolog of the Alzheimer's disease susceptibility gene
1028	protein kinase C-binding protein nel homolog 1

1029	dipeptidyl aminopeptidase related protein (DPP6)
1030	renin
1031	cathepsin K
1032	proteasome subunit RC10-II
1033	metalloproteinase inhibitor 3 precursor; tissue Inhibitor of metalloproteinase 3 (TIMP3)
1034	Tyrosine phosphatase-like protein; negative regulator of PTPases in neuronal tissues, RAT PHEOCHROMOCYTOMA-DERIVED PROTEIN TYROSINE PHOSPHATASE-LIKE PROTEIN (EC 3.1.3.48)
1035	G protein coupled receptor, putative, GPR10
1036	telomerase protein component 1 (TLP1)
1037	RalGDSB; GTP/GDP dissociation stimulator for a ras-related GTPase
1038	inositol 1,4,5-triphosphate 3-kinase receptor 1
1039	DPDE4; cAMP-dependent 3',5'-cyclic phosphodiesterase 4B
1040	14-3-3 protein zeta/delta; PKC inhibitor protein-1; KCIP-1; mitochondrial import stimulation factor S1 subunit
1041	presenilin 1 (PSNL1; PSEN1; PS1); S182 protein
1042	protein kinase C-binding protein nel homolog 2
1043	mast cell protease 4 precursor (RMCP-4)
1044	angiotensin converting enzyme (ACE; somatic; dipeptidyl carboxypeptidase I; kininase II
1045	cathepsin H
1046	proteasome subunit RC7-I
1047	tissue carboxypeptidase inhibitor (TCI)
1048	adenosine A3 receptor (ADORA3); TGPCR1
1049	probable G protein-coupled receptor RTA
1050	apurinic/apyrimidinic endonuclease (AP endonuclease; APEX; APEN)
1051	Rgs4; regulator of G-protein signaling 4 (RGP4).
1052	PI4-K; phosphatidylinositol 4-kinase (92/100 kDa, soluble)
1053	Adenylyl cyclase type II
1054	PKI-alpha; cAMP-dependent protein kinase inhibitor (muscle/brain form)
1055	neuromodulin; axonal membrane protein GAP43; PP46; B-50; protein F1; calmodulin-binding protein P-57
1056	GAP-associated protein (p190).
1057	mast cell protease 6 precursor (RMCP-6)
1058	matrilysin precursor; PUMP-1 protease; uterine metalloproteinase; matrix metalloproteinase 7 (MMP7); matrin
1059	cathepsin S precursor (CTSS)
1060	26S protease regulatory subunit 8; SUG1; p45/SUG; TAT-binding protein homolog 10 (TBP10); PSMC5
1061	plasma proteinase inhibitor alpha-1-inhibitor III
1062	adenosine A1 receptor (ADORA1)
1063	orphan nuclear receptor TR4; NR2C2
1064	MLH1 DNA mismatch repair protein
1065	RIN1; interacts directly with Ras and competes with Raf1
1066	PI4-K; phosphatidylinositol 4-kinase (230 kDa)
1067	Adenylyl cyclase (olfactive type) type III
1068	PKI-beta; cAMP-dependent protein kinase inhibitor (testis form)
1069	SHPS-1 receptor-like protein with SH2 binding site
1070	phospholipase A-2-activating protein (PLAP)
1071	mast cell protease 8 precursor (RMCP-8) + mast cell protease 9 precursor (RMCP-9) + mast cell protease 10 precursor (RMCP-10)
1072	carboxypeptidase E; carboxipeptidase H
1073	cathepsin L

1074	26S protease regulatory subunit 7 (P26S7); MSS1; PSMC2 (or 26S protease regulatory subunit 6B (P26S6B); TAT-binding protein 7 (TBP7); PSMC4)
1075	plasminogen activator inhibitor -1 (PAI-1)
1076	adenosine A2A receptor (ADORA2A)
1077	ovalbumin upstream promoter gamma nuclear receptor rCOUPg
1078	O-6-methylguanine-DNA methyltransferase (MGMT); methylated-DNA-protein-cysteine methyltransferase
1079	phospholipase C gamma 1 9PLC gamma-1); PLC-II; PLC-148
1080	phospholipase C beta 3 (PLC-beta 3)
1081	Adenylyl cyclase type V
1082	14-3-3 protein gamma subtype; putative protein kinase C regulatory protein
1083	chloride channel RCL1
1084	nitric oxide synthase 1
1085	tissue-type plasminogen activator (t-PA)
1086	amonipectidase B
1087	cathepsin B
1088	26S protease regulatory subunit 6B (P26S6B); TAT-binding protein 7 (TBP7); PSMC4 (or 26S protease regulatory subunit 7 (P26S7); MSS1)
1089	calpastatin
1090	adenosine A2B receptor (ADORA2B)
1091	Ear-3; V-erbA related protein; COUP-TFI transcription factor
1092	replication protein A 32-kDa subunit (RPA); replication factor-A protein 2 (RFA; RPA2)
1093	phospholipase C gamma 2 (PLC gamma-2); PLC-IV
1094	phospholipase C beta 1 (PLC beta 1); PLC-I; PLC-154
1095	calcineurin B-like protein (CBLP) + calcium-binding polypeptide
1096	14-3-3 protein eta; PKC inhibitor protein-1; KCIP-1
1097	frizzled-1 (FZ-1); Drosophila tissue polarity gene frizzled homolog ; dishevelled receptor
1098	carboxypeptidase D precursor (CPD)
1099	dipeptidyl peptidase IV (DPPIV ; DPP4); bile canaliculus domain-specific membrane glycoprotein; gp110 glycoprotein
1100	membrane-type matrix metalloproteinase MT3-MMP
1101	apopain precursor; CPP32 cysteine protease; caspase-3 (CASP3); interleukin-1 beta converting enzyme-like protein (LICE); YAMA protein; SREBP cleavage activity 1 (SCA1)
1102	26S protease regulatory subunit 4 (P26S4); PSMC1
1103	plasminogen activator inhibitor 2A
1104	extracellular calcium-sensing receptor precursor (CASR); parathyroid cell calcium-sensing receptor
1105	1D-myo-inositol-trisphosphate 3-kinase A (ITPKA); inositol 1,4,5-triphosphate 3-kinase (IP3 3-kinase; IP3K)
1106	structure-specific recognition protein 1 (SSRP1); recombination signal sequence recognition protein; T160; CIIDBP
1107	phospholipase C delta 1 (PLC delta-1); PLC-III
1108	Ca2+-independent phospholipase A2
1109	calbindin D28; avian- type vitamin D-dependent calcium-binding protein (CABP); spot 35 protein; CALB1
1110	14-3-3 protein theta; 14-3-3 protein tau
1111	PDGF-associated protein
1112	dipeptidase (DPEP1)
1113	prohormone convertase 2
1114	kidney aminopeptidase M (APM)
1115	caspase-1 (CASP3); interleukin-1 beta convertase precursor (IL-1BC); IL-1 beta converting enzyme (ICE)
1116	proteasome beta subunit precursor; macropain beta; multicatalytic endopeptidase complex

	beta; proteasome chain 3; RN3; PSMB4
1117	type I procollagen C proteinase enhancer protein
1118	B2 bradykinin receptor (BK2 receptor; BDKRB2)
1119	ezzrin; cytovillin; villin 2 (VIL2); p81
1120	neuronatin
1121	FKBP-rapamycin-associated protein (FRAP); rapamycin target protein (RAFT1)
1122	cAMP phosphodiesterase 4A; DPDE2; dunce Drosophila homolog E2
1123	calretinin
1124	14-3-3 protein epsilon; PKC inhibitor protein-1; KCIP-1; mitochondrial import stimulation factor L subunit
1125	ADP-ribosylation factor 1 (ARF1)
1126	tripeptidylpeptidase II
1127	thrombin
1128	metalloendopeptidase meprin beta subunit
1129	proteasome component C2
1130	ATPase, proteasomal, liver, TBP1
1131	thimet oligopeptidase (THOP1); endooligopeptidase A; endopeptidase 24.15; PZ-peptidase; soluble metalloendopeptidase
1132	lysosphingolipid, G protein-coupled receptor
1133	plectin
1134	Sca1; spinocerebellar ataxia type 1
1135	phospholipase C delta4
1136	cAMP-dependent 3',5'-cyclic phosphodiesterase; hormone-sensitive
1137	Calcineurin B subunit, CALCINEURIN B SUBUNIT ISOFORM 1 (PROTEIN PHOSPHATASE 2B REGULATORY SUBUNIT).
1138	LERK-2; EPLG2; Eph-related receptor tyrosine kinase ligand 2; ephrin-B1 precursor; Elk ligand precursor; Elk-L
1139	ADP-ribosylation factor 2
1140	neuroendocrine protein 7B2 precursor; secretogranin V; SGNE1
1141	trypsinogen 4
1142	endothelin converting enzyme
1143	proteasome component C3
1144	proteasome subunit C5
1145	Cak tyrosine-protein kinase; EDDR1; Trk-E; Ptk-3; discoidin receptor
1146	proteinase activated receptor 2 precursor (PAR-2)
1147	growth factor; Arc
1148	fibroblast growth factor receptor-activating protein 1 (FGF receptor-activating protein 1; FRAG1)
1149	inositol polyphosphate 5' phosphatase SHIP
1150	DPDE3; cAMP-dependent 3',5'-cyclic phosphodiesterase 4D
1151	NEURONAL CALCIUM SENSOR 1 (NCS-1))
1152	mothers against DPP protein rat homolog 1 (MAD1)
1153	ADP-ribosylation factor 3 (ARF3)
1154	chymotrypsinogen B precursor (EC 3.4.21.1)
1155	granzyme M precursor (GZMM); MET-ASE; natural killer cell granular protease; RNK-MET-1
1156	polypeptide, 53 kDa, growth factor induced
1157	proteasome component C8
1158	proteasome subunit C9
1159	Flk tyrosine-protein kinase; fps/fes-related
1160	chemokine receptor-like 1 (CMKLR1); G protein-coupled chemoattractant-like receptor; DEZ
1161	calponin, acidic
1162	interferon induced protein

1163	inositol polyphosphate 4-phosphatase type II alpha + inositol polyphosphate 4-phosphatase type II-beta
1164	adenylyl cyclase type VI (ADCY6); ATP pyrophosphate-lyase; Ca(2+)-inhibitable adenylyl cyclase
1165	NVP; neural visinin-like Ca2+-binding protein , VISININ-LIKE PROTEIN 1 (VILIP-1) (NEURAL VISININ-LIKE PROTEIN 1) (NVL-1) (NVP-1) (21 KD CABP).
1166	mothers against DPP protein rat homolog 3 (MAD3); putative tumor suppressor
1167	ADP-ribosylation factor 4 (ARF4)
1168	elastase 2 precursor (EC 3.4.21.71)
1169	mast cell protease 1 precursor (RMCP-1)
1170	stromelysin 3; matrix metalloproteinase 11 (MMP11)
1171	proteasome subunit RC6-1
1172	tissue inhibitor of metalloproteinase-1 (TIMP-1)
1173	serine/threonine kinase receptor, type I
1174	G protein coupled receptor 1
1175	cofilin
1176	Opposite gonadotropin-releasing hormone (GnRH)